



**Influence of French Air Power Strategy in the European Union's
Military Operations in Africa (2003-2009)**

by

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APPROVAL

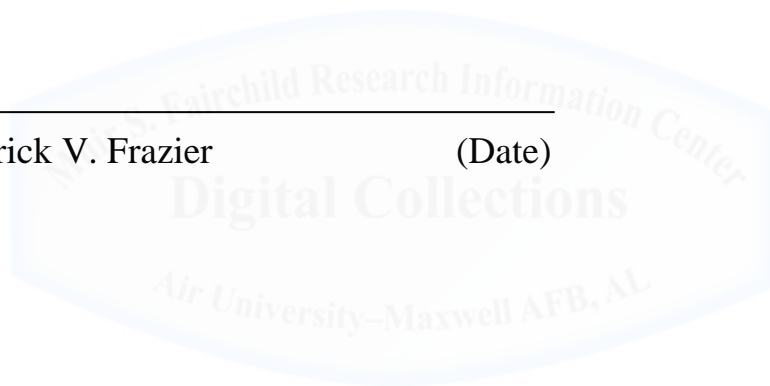
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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US or French governments, Departments of Defense, Air Forces, or Air University.



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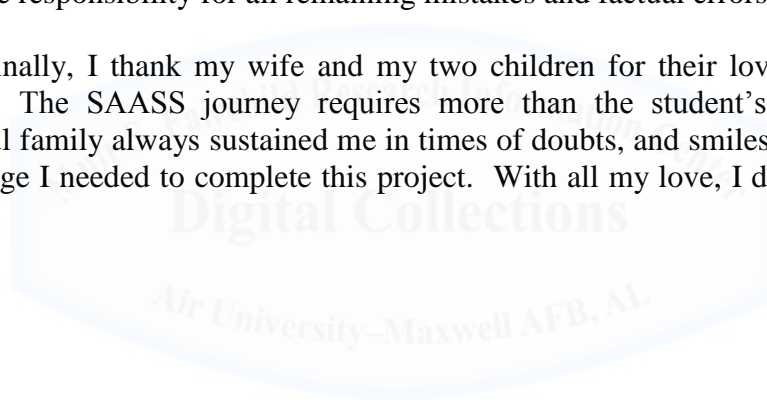


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ABSTRACT

Between the 1960s and the 2000s, France developed specific ways to operate on the African continent, and the use of air power became a central element of French strategy in limited operations. During that period, France also got involved in the European construction, and played a leading role in the military part of it. At the end of the 1990s, the European Union (EU) countries launched the European Security and Defense Policy (ESDP). Under this aegis, between 2003 and 2009, the EU launched three autonomous military operations in Africa: Artemis (2003) and EUFOR RD Congo (2006) in Democratic Republic of Congo and EUFOR Tchad/RCA (2008/2009) in the Republic of Chad and in the Central African Republic.

The aim of this analysis is to understand how French experience influenced the EU use of air power in order to reveal air power's strengths and weaknesses, and improve its potential effectiveness during subsequent operations. Using a case study methodology, this paper first establishes a model of the French use of air power in Africa during its limited operations, and then compares it to the use of air power in the three EU operations.

The study spans three levels of analysis. At the political level, France developed the concept of Air Power Diplomacy. French leaders used the political impact of air power as a diplomatic tool. At the strategic military level, the French military was able to translate this will in an effective way because political and military leaders designed an effective organization. At the operational and tactical levels, the French model emphasized the use of small cells of fighter and transport aircraft, supported by C135FR as well as helicopters. The study argues that while operation Artemis was close to the French model, the two subsequent EUFOR missions showed political and operational deviations.

Through the deviations from the French model, this study assesses key operational factors in order to determine implications for the future of the ESDP and proposes ways of improvement of EU military forces and organization, to include procurement and training strategies and the use of air assets in limited operations.

CONTENTS

Chapter	Page
DISCLAIMER	III
ABOUT THE AUTHOR	IV
ACKNOWLEDGEMENTS	V
ABSTRACT	VI
INTRODUCTION	1
1 DEVELOPMENT OF FRENCH USE OF AIR POWER IN AFRICA (1962-2002)..	7
2 ARTEMIS 12 JUNE-1 SEPTEMBER 2003	26
3 EUFOR RD CONGO 30 JULY-30 NOVEMBER 2006	38
4 EUFOR TCHAD/RCA 15 MARCH 2008-15 MARCH 2009	52
5 EVALUATION FOR THE EU'S FUTURE MILITARY OPERATIONS	68
CONCLUSION	82
GLOSSARY	93
BIBLIOGRAPHY	97

ILLUSTRATIONS

Table

1 – TABLE OF COMPARISON ACROSS THE CASE STUDIES	69
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Figure

APPENDIX A - MAP OF AFRICA	88
APPENDIX B - C2 AND AIR ASSETS–OPERATION ARTEMIS	89
APPENDIX C - C2 AND AIR ASSETS-OPERATION EUFOR RD CONGO	90
APPENDIX D - C2 AND AIR ASSETS-OPERATION EUFOR TCHAD/RCA.....	91
APPENDIX E - C2 AND AIR ASSETS-OPERATION EUFOR TCHAD/RCA– DARFUR REGION	92

INTRODUCTION

The politics of security and defense policy are without a doubt the ones that lend themselves the least easily to a collective European approach; and yet, after the issue of a common currency, it is in this area that the European Union has achieved the most rapid and spectacular progress over the past five years.

- Javier Solana, High Representative for Common Foreign and Security Policy of the European Union (1999-2009)

The security and prosperity of France and the European Union are closely linked to the security and prosperity in Africa.

- Nicolas Sarkozy, French Republic President, Le Cap (2008)

Since the 1998 French-British summit at Saint Malo that served as a launching ramp for the European Security and Defense Policy (ESDP), the European Union (EU) has participated in more than twenty civil and military operations. In particular, between 2003 and 2009, the European Union launched three autonomous military operations in Africa: Artemis (2003) and EUFOR RD Congo (2006) in Democratic Republic of Congo and EUFOR Tchad/RCA (2008/2009) in the Republic of Chad and in the Central African Republic (CAR).¹ While the European Union is a new actor on the international military stage, however, some of its member countries have a long lasting experience of interventions outside the European continent.

Among these countries, France developed patterns of intervention in Africa that relied heavily on the use of air power, during the postcolonial years. In addition to intervention in former French colonies such as Chad and the CAR, French military forces have operated in other various parts of Africa as well. From this experience between the 1960s and the 2000s, France developed specific ways to operate in the African continent, and the use of air power became a central element of the French strategy. The most emblematic symbols of the French style became the Jaguar and the C160 Transall; both aircraft have become closely associated with operations in Africa.

¹ Tchad is the French name of the Republic of Chad. As in all official publications, this paper will use “EUFOR Tchad/RCA” when dealing with the operation, and the English name, Chad, for all other references to the country.

Taking into account the recent EU role in Congo, Chad and the CAR with the longer French experience, this paper considers how the use of forces by the European Union, and particularly the use of air power, capitalized on the French-unique experience in Africa. The study expects to reveal some differences between the two approaches and explain them with specific political and operational contextual factors.

In short, the EU has a different approach to operations, notably incorporating the notion of a civilian “touch” in its execution. Such an approach encompasses a global vision of crisis, not only its military aspects. As Frederic Charillon observes about the European Union, “the power is civilian supported by the military, instead of military followed by the civilian.”² How do these new conditions translate in the use of force? Specifically, how do they influence the use of air power? The aim of this analysis is, therefore, to reveal the strengths and weaknesses of the European use of air power, and improve its potential effectiveness during subsequent operations.

DELIMITING THE FIELD OF STUDY

In order to be effective, it proved necessary to limit the scope of this study. First, this study focuses on air power. As the air force, navy and army all contribute to this function; this paper does not narrow the field of research to one service. However, it describes land operations only when their context is relevant to provide the background or material for the study of the use of air power. Second, this study does not aim at covering the entire history of French air power in Africa, but rather focuses on the relevant factors of comparison. Finally, in order to remain accessible to the greatest audience possible, this study does not use any classified material.

METHODOLOGY

Using a case study methodology, this paper will first establish a model of the French use of air power in Africa during limited operations. It will then use this model and compare it to the way the European Union used air power during the three operations in Congo, Chad and the CAR. The intent is to categorize the factors illustrating differences,

² Frederic Charillon, "L' Europe et le Monde: Un Interventionnisme Inachevé," in *L' Etat du Monde 2009*, ed. Bertrand Badie and Sandrine Tolotti (Paris: La Découverte, 25 September 2008), 52.

particularly with regard to political and operational constraints. This study unfolds in four parts.

First, Chapter 1 will establish the model for comparison. It will stem from French experiences in Africa since the 1960s, and include the latest evolutions of French Air Force lessons learned from Afghanistan in the early 2000s. The chapter builds the units of analysis relevant to measure the influence of French experience in European Union operations.

The second part of the study will compare and contrast the French model with each one of the three EU military operations. It will particularly assess any deviation from the model, and identify the sources of divergence specifically focusing on operational and political factors. Following a chronological framework, Chapter 2 examines the 2003 mission, operation Artemis, Chapter 3 will focus on operation EUFOR RD Congo in 2006, and the 2007 operation EUFOR Tchad/RCA will constitute the central topic of Chapter 4.

Third, in order to extend this study beyond the historical cases, Chapter 5 will discuss recommendations regarding the organization of the European Military structure, force composition, training, or the planning of future European Union operations.

Finally, the conclusion explores the enduring implications for the European Union according to its use of air power in limited operations, focusing on the political, organizational, and military consequences of the study.

REVIEW OF THE LITERATURE AND SOURCES

As this work encompasses two parts, a conceptual piece to build the model and a historical part using the three case studies, the use of sources and their origins mirror these two different parts.

Among the literature used to establish the model of intervention, several studies are noticeable. First, Patrick Facon, *Histoire de l'Armée de l'Air*, provides the context of French operations in Africa in the broadest history of the French Air Force.³ In the same vein, with *L'Armée de l'air*, Pierre Pascalon provides clear insight into the French Air Force and introduces most of the challenges it faced during the 2000s, including its

³ Patrick Facon, *Histoire de L'armée de L'air* (Paris: La Documentation Française, 2009).

doctrine, materials, and perspectives for the future. Both books proved necessary to provide a more holistic review of the topic.

More specifically, two historical researches in the English language significantly contributed to this study. Mark Lorell's extensive study, *Airpower in Peripheral Conflict: the French Experience in Africa*, represents a major piece.⁴ This study covers the period from 1962 (the end of the Algerian conflict) to the end of the 1980s. As a good complement, Geraud Laborie's research paper, *The Diplomacy of the Jaguar: French Airpower in Postcolonial African Conflicts*, extends the study until the 2000s and offers a great transition to the present study.⁵

The work on the conceptual aspects, while spanning several years, is particularly current, and key actors still influence it. The Centre d'Etudes Stratégiques Aérospatiales (CESA, the French Center for Aerospace Strategic Studies) is the driving force behind this discussion. The workshop on Air Power Diplomacy, as well as its subsequent publication in *Penser les Ailes Françaises*, provided a conceptual background on the evolution of the French doctrine.⁶ Finally, the work of two great specialists of the topic - Hervé Couteau-Bégarie at the College Interarmées de Défense (CID) who introduced the concept of "air power diplomacy," and Jérôme de Lespinois at the CESA- are particularly notable.⁷

The sources on the three operations are broad and eclectic. Beyond the official documents including the United Nations, European Union, and national legislations, a great literature has particularly flourished since 2003 to study the political roots and consequences of these operations. Particularly noticeable are the publications from the European Union Institute for Security Studies as they offer relevant assessments of the

⁴ Mark A. Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," in *Project Air Force* (RAND, 1989).

⁵ Geraud J. Laborie, *The Diplomacy of the Jaguar: French Airpower in Postcolonial African Conflicts*, vol. 39, The Wright Flyer Papers (Maxwell Air Force Base, AL: Air University Press, March 2009).

⁶ In February 2010, the CESA organized a workshop around the concept of "Diplomatie Aérienne" (air power diplomacy) at l'Ecole Militaire in Paris. It further published the content of the discussions in its magazine. For more details, see *Penser les Ailes Françaises* Winter 2010/2011.

⁷ The exact name of the concept in French is "Diplomatie aérienne," and a good way to translate it would have been "air diplomacy." This would have mirrored the concept of "Naval diplomacy," which was the first aim of his inventor, Hervé Couteau-Bégarie. However, to keep the idea beyond the words, the best translation, in my opinion, is "air power diplomacy."

political evolutions as well as the political-military relations inside the European Union. Among these publications, *European Security and Defense Policy: the First Ten Years*, and *What Ambitions for European Defense in 2020*, were among the most valuable pieces for this study.⁸

Reflecting the evolution in the depth of study of the European Union operations, I noticed the evolution in the analysis of the successive operations. While most studies on Artemis focused on political considerations, the latest of the three operations, EUFOR Tchad RCA, nurtured a broad range of studies, including in-depth analysis of the operational level. Among them, the study of Alexander Mattelaer, focusing on the strategic planning of the operation, is noteworthy.⁹

If great sections of the military sources are still classified, articles, speeches, and conferences of senior military leaders involved in these operations provide a great picture of the situation. As a complement, aeronautic specialized press provides insight on force composition or specific use of assets. Particularly noteworthy are the articles of Jean-Michel Guhl or Jean-Louis Promé on operation Artemis.¹⁰ They combine a deep knowledge of air forces and the field experience of their authors. Claudia Major and Denis Tull produced two excellent studies on operation EUFOR RD Congo.¹¹ They both provide a clear picture of the challenges and achievements of this operation. In the same vein, the final Western European Union (WEU) report on the operation also provides a breadth of analysis in an uncompromising fashion.¹² Concerning operation EUFOR

⁸ *European Security and Defence Policy: The First Ten Years (1999-2009)*, ed. Giovanni Grevi, Damien Helly, and Daniel Keohane (Paris: European Union Institute for Security Studies, 2009), *What Ambitions for European Defence in 2020?*, ed. Álvaro de Vasconcelos (European Union Institute for Security Studies, 2009).

⁹ Alexander Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," *Institute for European Studies* (2008).

¹⁰ Jean-Michel Guhl, "Bunia (RDC) 2003: L'opération "Artémis" Sécurise la Tête de Pont de l' Ituri," *Air Zone* September 2003, Jean-Louis Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," *Air Fan* November 2003.

¹¹ Claudia Major, "EU-UN Cooperation in Military Crisis Management: The Experience of EUFOR RD Congo in 2006," *Occasional papers (Institute for Security Studies (Paris, France))* no 72 (2008), Denis M. Tull, "EUFOR RD Congo: A Success, but Not a Model," in *The EU as a Strategic Actor in the Realm of Security and Defence? A Systematic Assessment of ESDP Missions and Operations* ed. Muriel Asseburg and Ronja Kempin (Berlin: SWP Research Paper, December 2009).

¹² Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," (20 December 2006).

Tchad/RCA, two studies proved particularly significant. Alexander Mattelaer, already mentioned, focused on strategic planning, and Bjørn Seibert, centered his research on logistics and unearthed many of the challenges EU forces faced during that operation.¹³

Finally, because the events under inquiry are recent, most of the military documents related to the three operations are still classified. However, it is unlikely that the European Union will wait until the declassification of the details to launch its next operation. Furthermore, it is unlikely that hidden tactical details or secret political agreements will modify the conclusions of this study, which focuses on patterns of operations, organization and structure as well as means to execute the military tasks. Finally, the predictable declassification that will occur in the future will certainly provide more fields for research that will surely complement this study.



¹³ Bjørn H. Seibert, "African Adventure? Assessing the European Union's Military Intervention in Chad and the Central African Republic," *MIT Security Studies Program Working Paper* (November 2007).

Chapter 1

DEVELOPMENT OF FRENCH USE OF AIR POWER IN AFRICA (1962-2002)

Today, if we can label air power as a diplomatic tool, it is, first, because it has the potential to influence the behavior of another nation without engaging an open and visible violent action. It can do it at all times, almost everywhere in the world.

- General Jean-Paul Palomeros, French Air Force chief of staff

Deploying combat aircraft in Africa provides the means to know, support, and deter in the main part of the continent, without the risk of engaging ground troops. Therefore, the presence of combat aircrafts - fighter, or tactical airlift - in the center of Africa, constitutes for France a strategic capability.

- Colonel Daniel Kerfriden, French Air Force

As these top military leaders of the French Air Force suggest, air power has become the predominant strategic tool of the French military, particularly in Africa. While this may seem a very parochial vision of their service as well as of the importance of air power, it is not. During the last fifty years, the French military has developed a specific way to operate in Africa. This strategy relies predominantly, but not exclusively, on air power. The experience in Algeria, where nearly half a million troops got involved, shaped subsequent operations. In the need to follow the decolonization movement, through air power, France found a way to intervene effectively *on the cheap*. Building on its experiences, successes and failures, the French military developed patterns of intervention around the concept of air power. Even more important, political leaders enthusiastically embraced this model in what they eventually called *air power diplomacy*.

All operations have different contexts; however, an historical analysis of French military interventions in Africa between 1962 and 2002 highlights several patterns and trends. These patterns of intervention represent the central concern of this chapter. They will constitute the units of analysis and serve as a means of comparison to the subsequent European Union patterns.

The building of the model of French use of air power in Africa involves three levels of analysis. First, at the political level, France developed the concept of Air Power Diplomacy. French leaders used the political impact of air power as a diplomatic tool, and only involved small contingents of land forces to resolve crises. Next, at the strategic military level, the French military was able to translate this will in an effective way because political and military leaders specifically designed an organization around the Chef d'Etat-Major des Armées (CEMA or Chief of the Defense Staff) to plan and conduct French operations. As described in this chapter, this organization possesses four characteristics: uniqueness, strategic watch, openness to the French Ministry of Foreign Affairs (Ministère des Affaires Etrangères), and continuity. Third, at the operational and tactical levels, the French model emphasizes the use of small cells of fighter and transport aircraft, supported by C135FR as well as a few helicopters.¹

This chapter first reviews the different historical phases of French policy toward Africa. It examines the concept of air power diplomacy developed by French theorists and military leaders. The study then details the command and control organization, including the planning of French operations, which are not specific to African operations, but inform us about the use of air power. Finally, this chapter lists the use of the different assets (transport and fighter aircraft, helicopters) in the achievement of the global strategy, and shows how they became important in the French strategy. This section also includes the lessons France implemented from its involvement in Afghanistan in the early 2000s as French forces integrated them quickly in their tactics and procedures, making them relevant as soon as 2002, before operation Artemis kicked off.

In order to understand how the French use of air power evolved, it is first necessary to review the political phases that led to the creation of the model.

HISTORICAL BACKGROUND

The construction of the model of French interventions in Africa began just after the mass decolonizations in the 1960s. As Francois Gaulme describes them, three

¹ The entire study does not aim at investigating the full patterns of intervention in EU operations, but rather explore them through the specific point of view of the French model. The chapter builds the three units of analysis (political, military organization, and employment of air assets) that will serve as lenses to study the use of air power during EU operations.

distinct periods delineate the modern history of French intervention in Africa.² Each one of them has allowed the French military services to refine their model of use of airpower.

The first one spanned from 1960 to 1974 when France considered its former colonies as its “Pré carré” (backyard). In order to protect its interests, France contracted defense agreements with most of its former colonies between 1959 and 1961.³ In addition to the protection of its economic interests, France wanted to avoid a political or military vacuum that would favor the Soviet bloc. During this phase, France focused mainly on its former colonies and developed, in reaction to the Algerian and Indochinese conflicts, a predilection for small force operations.

The second phase covered the period from 1974 to 1994. Usually labeled as the “Gendarme de l’Afrique” (Policeman of Africa), France became more interventionist during that period, even outside its former colonies.⁴ For air power, this period marked the beginning of the golden age. Under President Giscard, the role of the aircraft became preeminent. Operation Lamantin against the Polisario demonstrated the ability of the FAF to provide the leading (not the only) element of French strategy in Africa.⁵ This movement culminated with the 1994 French White Paper, which recognized the use of the third dimension as a major instrument of “power projection.”⁶ However, at the beginning of the 1990s, and with the end of the Cold War, France began to assume a more defensive role that led to the next phase.

² Francois Gaulme, “La Politique Française d’Intervention Dans les Conflits Limités en Afrique” (paper presented at the The Use of Air Power in Low Intensity Asymmetric Warfare Conference, Paris, 19 October 2006), 7-8.

³ In order to keep commercial ties and protect its commercial interests, France contracted military agreements with its former colonies. They were predominantly of two types. First, defense agreements were the most developed and integrated forms of links. They authorize the deployment of French troops under direct command and control of the French ministry of defense in the specific countries. The second type, the military cooperation agreement, allows the cooperation of military forces and includes the training and management of the host country’s troops. From that perspective, French troops are not supposed to get directly involved in combat missions. Finally, as Francois Gaulme reminds us, a variant exists where French troops’ involvement may result from a specific agreement or a temporary operation such as a bilateral agreement, UN mandate, or European mandate to answer a UN request. For further details, see Gaulme, “La Politique Française d’Intervention Dans les Conflits Limités en Afrique”, 7.

⁴ Gaulme, “La Politique Française d’Intervention Dans les Conflits Limités en Afrique”, 8.

⁵ Facon, *Histoire de L’armée de L’air*, 451.

⁶ Facon, *Histoire de L’armée de L’air*, 458.

The third phase began in 1994 after the Rwanda genocide. France modified its patterns of intervention and, while still involved on the continent, took a different approach, handing over security in Africa to the Africans. It marked the end of French-only interventions, and initiated its participation as part of European Union interventions. From 1994 to 2003, lessons learned from the African operations became scarce, but the FAF introduced new concepts for its limited operations from its experience in Afghanistan. At the same time, without changing the patterns of intervention, France also modernized the fleets of fighter aircrafts involved in Africa, and replaced its aging Jaguars with Mirage F1s.

The political background and the three historical phases explain how, at the political level, France came to assimilate air power as a diplomatic tool. What are the characteristics of this model?

POLITICAL LEVEL: INTRODUCING THE CONCEPT OF AIR POWER DIPLOMACY

France developed the role of air power in Africa as a political tool. Conceptualized by French theorists and military leaders, the use of air power by France became the French policy known as *air power diplomacy*. Its emblematic aircraft, the Jaguar, embodied French policy in Africa and gave birth to the expression of the “diplomacy of the Jaguar.”⁷

The concept of air power diplomacy applies to limited operations. They are “military operations other than war,” that General Michel Forget describe as military interventions in countries, “when we are not at war with their government.”⁸ James Corum and Wray Johnson would also suggest that they do not involve national survival.⁹ However, the stability of these countries may affect directly our interests, or they may be

⁷ Geraud J. Laborie, *The Diplomacy of the Jaguar: French Airpower in Postcolonial Conflicts*, The Wright Flyer Papers (Maxwell AFB, AL: Air University Press, March 2009).

⁸ The anglo-saxon designation for these operations used to be “military operations other than war.” France use to call them “opérations extérieures.” For further details, see Michel Forget, “Spécificités du Rôle et des Contraintes des Forces Aériennes” (paper presented at the The Use of Air Power in Low Intensity Asymmetric Warfare Conference, Paris, 19 October 2006), 34.

⁹ James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists*, Modern War Studies (Lawrence, KA: University Press of Kansas, 2003), 3.

the place of unacceptable or catastrophic events (violence against populations, insurgency, or natural disasters).

During limited operations, borders between diplomacy and offensive operations become blurred. Among the leaders of this conceptualization, Couteau-Begarie, contends that, the dichotomy between war and peace led to a broader spectrum with what we call “crisis” in between.¹⁰ During crises, France considers that deploying military assets, and particularly air assets, may belong to the realm of diplomacy. Corum and Johnson provide an explanation reminding us that in this type of limited conflict, political, social, economic, and psychological concerns overshadow the military dimension.¹¹

In Africa, the aircraft, because of its flexibility and capabilities of fast intervention over huge distances, became a diplomatic tool. As General Fleury reminds us, the French concept is that, “only air power can respond in the shortest possible time and demonstrate the determination of a country around the world within 48 hours.”¹² Deploying aircraft or flying reconnaissance missions are also part of the political discussion, expressing French resolve. It stems from the same philosophy as sailing an aircraft carrier off the coast of a country. As France wanted to keep its operations limited, the aircraft particularly suited this concept. Lorell emphasizes this idea when he contends that, after Algeria, and unlike the United States in Vietnam, France refused to commit large conventional contingents in Africa.¹³ Additionally, France learned from short missions like operation Manta the desirability of avoiding long-term commitments abroad.¹⁴

The politicization of the military tool subsequently tied it to political control. As General Forget assessed, these operations constrained the forces to operate under tight

¹⁰ Hervé Couteau-Bégarie, "Qu'est-Ce-Que la Diplomatie Aérienne?," *Penser Les Ailes Françaises* Winter 2010/2011, 16.

¹¹ Corum and Johnson, *Airpower in Small Wars*, 5.

¹² In the French organization, the command structure that links the President to the military forces is particularly direct, via the CEMA. In particular, for assets that have a high political value, such as Special Forces or, in this case, air power, the president retains a high level of control. This straight line between the president and the forces is what we refer to as "tight-control." General Jean Fleury, "Diplomatie et Armées de l' Air," *Penser Les Ailes Françaises* Winter 2010/2011, 30.

¹³ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 64.

¹⁴ As introduced by Lorell, the main lesson France learned from operation Manta was to avoid a quagmire. The military and political leadership wanted to avoid an endless operation that would involve a huge economic, political, and military cost. The next operation, therefore, would have to be "quick, sharp, and decisive." For further details, see Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 50.

political control.¹⁵ French military organization evolved as to design a system that translated political will, and this system suits the use of airpower. The next part addresses the planning and conduct of military operations, including command and control issues.

PLANNING, COMMAND AND CONTROL

At the strategic military level, France has designed an effective system of planning and control of operations that relies on four principles: uniqueness, strategic watch, openness to the French Ministry of Foreign Affairs, and continuity. As the former Chief of the Defense Staff, General Henri Bentégeat, reminds us, the reactivity of the military forces stems from “the quality of the command structures which prepare and translate decisions, which are always political.”¹⁶

The CEMA is at the center of that system. He is both the military adviser to the president and the government, and the commandant of all French operations.¹⁷ The Chiefs of Staff of the different services are also under his command. Created in 2004, the Centre de Planification et de Conduite des Opérations(CPCO) operates under the CEMA’s command.¹⁸ It fulfills three missions: strategic watch, strategic planning, and conduct of operations. The fact that there is no discontinuity between watch and action ensures the reactivity of the French military when facing a crisis. When a crisis begins, and the French President approves a French intervention, the CPCO creates a Joint Task Force (JTF). The CEMA controls this JTF via the CPCO.

Furthermore, the CPCO keeps up links with the different military services’ staffs, which provide intelligence, situation awareness, and options. It is also linked to the French Ministry of Foreign Affairs, to exchange information on the planning or the

¹⁵ Forget, "Spécificités du Rôle et des Contraintes des Forces Aériennes", 34.

¹⁶ General Henri Bentégeat, "Construire l'Europe de la Défense-Améliorer l' Alliance Atlantique," in *Nato's Nations and Partners for Peace* (Uithoorn: 2004).

¹⁷ In the French system, we refer to the CEMA as the “commandant” of French operations as he retains COCOM over all operations. He would be the equivalent of the Combatant Commanders in the US system.

¹⁸ Admiral Jean-Pierre Teule, "Le CPCO au Cœur de Nos Opérations," *Défense Nationale et Sécurité Collective* May 2007, 64.

conduct of operations.¹⁹ The CPCO acts as a fusion center. As all these actors work in peacetime together, the connections and links are already in place. This network inside and outside the ministry of defense reduces the time necessary to build an operation.²⁰

With his staff, the CEMA ensures the continuity between planning, up to the highest political levels, and execution of the operation. The command and control of those operations encompasses all the military assets of the French state.

The French system provides reactivity and direct political control, but has lacked flexibility at the lowest levels of command. As described previously, as France considered its air power a diplomatic tool, there was a risk in having too much centralization of the execution during certain operations. This is what General Forget has called a “very tight political control.”²¹ Occasionally, even if French Presidents did not pick out targets for operations during Tuesday luncheons, operational failures resulted from this tight control.²² This is what General Forget warns of when he says that, “it is not possible to command everything from Paris.”²³ Even with a tight control of the military by the political leaders, the local commanders must have enough flexibility at the local level. They must have enough autonomy to be able to execute the operation in a decentralized way.

After its withdrawal from the NATO integrated military structure, in 1966, France developed autonomous command and control structures. Unable to have access to NATO command structures, France still had to manage its own operations. Therefore, from its involvement in operations as well as the defense of its territory, France developed both static and deployable tools. In France, the organization mirrored the NATO fixed infrastructures and redundant headquarters. However, contrary to NATO,

¹⁹ "Le Déclenchement des Opérations: Rôle de l'EMA, du CPCO, et de l'EMO/Air," *Air Actualités* June 2006, 18-19.

²⁰ Teule, "Le CPCO au Cœur de Nos Opérations," 68-69.

²¹ Forget, "Spécificités du Rôle et des Contraintes des Forces Aériennes", 34.

²² This is a direct reference to President Johnson who, during the Vietnam War, used to choose the targets during the Tuesday White House luncheons. Close advisors were attending these luncheons but no military were invited before October 1967. For further details, see Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (Lincoln, NE: University of Nebraska Press, 2006), 84-85.

²³ On 25 January 1984, while awaiting the order from Paris to engage enemy troops, a Jaguar crashed in Chad, leading to the loss of the pilot. Forget, "Spécificités du Rôle et des Contraintes des Forces Aériennes", 37.

France also had to manage occasional crises in foreign countries. As a normal pattern, France came to rely on rapidly deployable flexible command structures that could be positioned close to the operation. For example, during Operation Lamentin, France deployed a command structure for air operations in the French embassy in Nouakchott.²⁴ From its position, out of the NATO's military structure, as assessed by General Wolsztynski, former chief of staff of the air force, France built a complete and coherent system.²⁵

France has designed a flexible command and control structure for the use of air power. While many theorists and air power historians emphasize the flexibility of the aircraft, it is necessary to precisely articulate this concept. It is true that the aircraft is a flexible tool. However, the flexibility of the aircraft at a tactical level is a necessary but not sufficient condition to make it a flexible military tool at the strategic or political level. The quality of the French Air Force command structure is that it provides this flexibility at all levels. The direct link between the political authorities and the military forces ensures the compliance to the political objectives. The links between the CPCO and the services provides a constructive dialogue on the employment of air power, and quick implementation when the political leadership decides to intervene. Finally, the deployment of variable command structures to command and control air power in the theater of operations provides flexibility to the lowest level.

To translate political decisions into action, France implemented a specific command and control organization at the strategic level. This system constitutes our second unit of analysis. At the same time, in order to reduce both cost and force footprints, France designed a concept for the deployment of small forces with high political value.

EXPLOITING FRENCH MILITARY AIR ASSETS

France has developed and improved a system of force deployment that relies on two echelons, and favors the use of air power for its implementation. As described by Lorell, "the first echelon [is] composed of small groups of French forces garrisoned

²⁴ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 30.

²⁵ General Richard Wolsztynski, "L'Armée de l' Air: Facteur d' Intégration Européenne," *Défense Nationale* June 2005, 11-12.

oversea at a few key permanent and temporary strategic bases in the former colonies [...]. The second echelon [is] based “over the horizon” in metropolitan France,” and deploys only when the first echelon proves insufficient to face a crisis.²⁶ During the period considered by this study (2003-2009), first echelon bases in Africa were Djibouti, Dakar, Libreville, and N’Djamena. As assessed by a senior French officer, these first echelon forces were able to answer to any crisis in Central or Western Africa in less than six hours.²⁷

In order to sustain this system, France keeps specialized forces in a high state of readiness, to be able to answer quickly to a crisis. For that purpose, since the 1970s, selected French squadrons take a rotating alert in France.²⁸ The concept relies on the ability to deploy them quickly and decisively during the first hours of a crisis, to be able to stabilize the situation, and negotiate a solution.

This concept of two echelons indicates the importance of air power in the French strategy in Africa. A common pattern is therefore, either to operate from one of the first echelon bases, or to use a major airport as a temporary operating base, and disengage at the end of the operation. The normal pattern of use of French air power in Africa proceeds from the integration of multiple assets (airlift, attack and reconnaissance aircraft, helicopter). However, in the aim of conceptualizing and establishing a model relevant for comparison, it is necessary to study the detail of each function separately. French airlift capabilities are the first under scrutiny.

French Military Airlift in Africa

Boosted by its long experience in African operations, French Airlift Command plays a critical role in deploying forces and sustaining the fight, but chronically lacks of strategic airlift capabilities. French transport aircraft perform the traditional role of

²⁶ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 3-4.

²⁷ Colonel Daniel Kerfriden, "Puissance Aérienne: Prévention et Gestion des Conflits Contemporains," *Défense Nationale et Sécurité Collective* June 2007, 41.

²⁸ As d'Abzac-Epezy and de Lespinois explain, Chadian operations triggered the set-up of a system of rotating alerts in France. In this system, several squadrons, except those involved in the nuclear posture, were selected and had to be prepared to deploy on call. This system is still in place today. For further details, see Claude d'Abzac-Epezy and Jerome de Lespinois, "Les Interventions Militaires Françaises en Afrique des Années 70 aux Années 90: l'Exemple du Tchad," in *La Politique de Sécurité de la France en Afrique*, ed. Pierre Pascalon (Paris: L'Harmattan, 2004), 64.

logistical and operational support of the forces. However, they are not suited for large, sustained operations, and need external help when crises expand. They operate along three main missions.

First, inter theater is an important asset of the strategy of second echelon but the FAF chronically experienced shortages in its implementation. This force has always been effective but only to deploy small contingents and has suffered from a chronic lack of strategic airlift capabilities. In 2003, at the beginning of the period of study, General Francois Beck, Commandant of the French Airlift Military Command, described the long-range capabilities of two DC8 and three A310 aircraft as insufficient to answer French needs.²⁹ In the same vein, though the C160 and the Nord-Atlas (before it was retired) were aircraft suited to Africa, they were not, as d'Abzac-Epezy and de Lespinois contend, designed for the projection of vast forces.³⁰ In the 1980s, the FAF tried filling the gap of inter-theater airlift with the acquisition of a small fleet of C130s. However, as Pierre Facon shows, it proved insufficient to meet its needs.³¹

Therefore, to compensate for its weaknesses in strategic airlift the FAF used two solutions. On the one hand, it leased civilian transport companies, as was the case for the deployment for operation Manta, when the FAF had to contract with the Union des Transports Aériens (UTA).³² On the other hand, the FAF asked its allies for external help, especially the USAF. For example, the USAF Military Airlift Command transported French troops in Zaire in 1978.³³ In the same vein, C5 Galaxy airlifters helped deploy forces from France during Epervier in 1986.³⁴ According to the political situation, this solution may be problematic when French political leaders do not want the United States to get involved in their operations.

²⁹ General Francois Beck, "Répondre Quotidiennement aux Exigences de Mobilité et de Réactivité: les Défis de la Force Aérienne de Projection," in *L'armée de l'Air. Les Armées Françaises à L'Aube du XXIe Siècle*, ed. Pierre Pascalon (Paris: L'Harmattan, 2003), 165.

³⁰ d'Abzac-Epezy and Lespinois, "Les Interventions Militaires Françaises en Afrique des Années 70 aux Années 90: l'Exemple du Tchad," 61.

³¹ In 1987, the FAF purchased a small fleet of C 130 Hercules. While improving the situation of the airlift command, it did not constitute a sufficient solution to solve the chronic deficit of assets. For further details, see Facon, *Histoire de L'armée de L'air*, 441.

³² Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 45.

³³ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 26.

³⁴ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 56.

Second, for intra-theater airlift, the FAF heavily relies on the C160. If the Jaguar has become the iconic fighter in Africa, the C160 Transall (Transport Allianz) is without contest the symbol of the transport aircraft in Africa. Because of the lack of infrastructures (reliable road networks) or because of hard climatic conditions (wet season disrupting landlines of communications), this transport aircraft is a vital element of strategy in Africa. For example, in Chad in 2007, after a flooding cut the few roads of the country and isolated the eastern part of the country, the FAF established an air bridge to supply refugee camps and sustain NGO efforts in Darfur.³⁵

The French Air Force developed specific knowledge and techniques to operate in basic environments, outside airport infrastructures.³⁶ The landing of a Transall on a short dirt strip, for example, is a daily mission for FAF crews. The French experience and expertise in that field is extensive. However, because of their low numbers, these assets operate intensively. This is what happened, for example, during the set up stage of Epervier in February 1986.³⁷

Third, French Airlift Command is responsible for specific combat missions. They encompass assault landing or the dropping of paratroopers and material during combat operations. For these missions as well, the usual pattern of the FAF is to rely on its C160s. To show the endurance of the model and its adequacy to African operations, these aircraft successfully dropped paratroops in Kolwezi (Zaire) in May 1978 and in Birao (CAR) in March 2007. Of course, the scale and the strategic importance were different, but they proceeded from the same pattern. They also dropped fuel and ammunitions to sustain rebels against Libyan forces during Epervier.³⁸ Along with airlift

³⁵ Marie Friocourt, "Le Pont Aérien Humanitaire au Tchad," *Air Actualités* September 2007, 14.

³⁶ Jean-Vincent Brisset, "Contribution de l' Armée de l' Air à la Politique Etrangère: Eléments de Comparaison Avec d' Autres Pays de l' OTAN," (Paris: Délégation aux Affaires Stratégiques, 2004), 53.

³⁷ In 1986, following the attack of Ouadi Doum, the FAF created a slot allowing the deployment of French troops at N'Djamena. The necessity to deploy assets rapidly, and the air bridge between Bangui and the Chadian capital demonstrated the limits of the use of French airlift capabilities. For more details, see d'Abzac-Epezy and Lespinois, "Les Interventions Militaires Françaises en Afrique des Années 70 aux Années 90: l' Exemple du Tchad," 57-62.

³⁸ In 1986, 12 Transalls dropped 12 tons of food, fuel, and ammunitions to rebel forces fighting against the Libyan. For further details, see Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 57.

operations, the use of fighter aircraft constitutes the core of French military policy in Africa.

Attack and Reconnaissance Aircraft and their Support

As air superiority does not usually represent a challenge during limited operations, France focused its approach of fighter operations in Africa along two main missions: reconnaissance and bombardment. This latter mission also involved the coordination of ground assets, and specifically the work with Special Forces. The Jaguar long represented the French fighter in Africa; however, during the 1990s, the Mirage F1CR, reconnaissance version of the Mirage F1C, and the Mirage F1CT, its ground attack version, gradually replaced the Jaguars. However, all these aircraft operated along the same core missions, divided among three employment types: air superiority, reconnaissance, and bombardment. Because the former did not usually challenge the FAF, the two latter were the most important and served as the main mission areas for air operations in Africa.

First, Giulio Douhet believed that command of the air was the sine qua none condition for air power; however, air superiority is seldom a challenge in limited military operations in Africa, and usually, the FAF does not deploy specific air defense assets. According to General Forget, in limited operations, “the ‘conquest’ of air superiority is usually not an issue.”³⁹ During the period under scrutiny, France only faced one competitor able to sustain the fight: the Libyan Air Force during Epervier in the late 1980s. This is the only operation when France involved ground based air defense (GBAD) assets on a big scale for the protection of N'Djamena, because of the threat of Libyan bombers and particularly the TU22s. France also answered to this threat by sending air defense assets, Mirage F1s, and SAM systems.⁴⁰ However, this single operation does not represent the normal pattern, which does not include specific air defense forces.

³⁹ Forget, "Spécificités du Rôle et des Contraintes des Forces Aériennes", 35.

⁴⁰ In retaliation to the attack on Ouadi Doum, the Libyan air force attacked N'Djamena airport on 16 February 1986 with a single TU22. One of the three bombs delivered hit the runway and disrupted French deployment. In retaliation, the French deployed Crotale medium-range SAMs as well as several AAA batteries. The following month, it deployed Hawk long-range SAM systems. For further details, see Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 55.

Second, the reconnaissance mission is the most common mission for fighter aircraft in Africa. It informs political and military leaders and orients their decisions. In the context of operations in Africa, the aircraft may be the main asset to inform about the forces in play, their infrastructures, and deployment status. To assess this importance, all the French fighter or bombers deployed to Africa possessed reconnaissance capabilities. While reconnaissance capabilities created for the Jaguar arrived as a supplement, the Mirage F1CR integrated the concept of reconnaissance, and included internal and external sensors. The new generation of French fighter, the Rafale, that may operate one day in Africa, possesses a reconnaissance pod called the Airborne Reconnaissance Electro Optical System (AREOS). Over hostile countries in Africa, France also used to send its Mirage IV, the former nuclear bomber retrofitted as a reconnaissance aircraft.

The use of a few French Navy reconnaissance assets is a normal pattern in African operations as well. The Atlantic (and then Atlantic 2 when enhanced with new capabilities) is an early warning and SIGINT aircraft. This anti-submarine warfare aircraft serves as "airborne command tactical post, communications relay, and ELINT platform."⁴¹

Third, because of the distances involved in African conflicts, Air-to-Air Refueling capabilities are important in order to deploy forces and execute missions. The C135FR, first acquired for the strategic nuclear mission, proved its usefulness on the African continent.⁴² These assets proved valuable to sustain the concept of second echelon, as they were necessary to deploy over-the-horizon forces from France. They revolutionized the use of aircraft in Africa, giving more flexibility and greater range and loiter time to attack aircraft. The first to benefit from this revolution were the Jaguars and then the Mirage F1C-200s.⁴³ A common employment procedure consists of deploying a C135FR with a cell of four fighters.⁴⁴ It is also a common pattern to deploy French tanker aircraft

⁴¹ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 20.

⁴² FAF Strategic Air Command (FAS) bought 12 C135Fs in the 1960s as a complement to the Mirage IV nuclear bomber. Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 17-18.

⁴³ The first Mirage F1s built at the end of the 1970s, below the number 200, lacked the AAR capability.

⁴⁴ The KC135F was retrofitted during the 1990s and the new version became the C135FR, which is the name that will be used in this study.

on airfields in different countries to reduce their vulnerabilities or avoid fuel shortages in the area of operations.⁴⁵

Because of the scarcity of its C135FR and because of the lack of flexibility of them in certain conditions (the C135FR is a modified Boeing 707 and therefore needs a long runway), the FAF retrofitted part of its C160 into Transall NGs (New Generation) which can refuel fighters. They have become a good complement to fighter aircraft when flexibility and medium-range requirements do not justify the use of a C135FR.

Most of the bombing missions during limited operations in Africa involve the use of guns. Of course, the bombing of Ouadi Doum by French Jaguars in February 1986, is one of the great feat of arms of the FAF, but it is not usual, and since then, the use of bombs has been rare.⁴⁶ Furthermore, deploying attack aircraft capable of bombing missions is a strong message France sends to the political actors involved in a crisis. They demonstrate the French resolve, and could bring a supplement of firepower should diplomatic efforts fail.

The FAF has a predilection for the use of rockets and guns against personnel or material, or more likely as warning shots. The main threat in limited operations consists of troops and light vehicles such as pick-up trucks. Therefore, shows of force, warning shots, or destruction shots with guns and rockets are sufficient to cover a wide spectrum of possible engagements.

The FAF used the lessons learned from operation Enduring Freedom to improve its doctrine of intervention in Africa, specifically the use of Special Forces.⁴⁷ Before

⁴⁵ Land transportation in Africa is limited because of the lack of infrastructures, and the lack of security. This phenomenon is amplified when it comes to operate from land-locked countries, like Chad or CAR. Shortages of fuel may become problematic. Therefore, when possible, the FAF prefers to base its tanker assets, which use huge amounts of fuel, in coastal countries, easy to supply by ship. For an account on shortages of fuel at N'Djamena during operation Manta in 1983, read Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 45.

⁴⁶ On 16 February 1986, a package composed of 10 Jaguars and 4 Mirage F1s, supported by 3 C135Fs attacked the Libyan Air Force at Ouadi Doum. This forward base of the LAF in Chadian territory directly threatened the deployment of a French force in N'Djamena. Protected by the Mirage F1s, the Jaguars destroyed the runway with antirunway bombs. For further details, see Laborie, *The Diplomacy of the Jaguar*, 17.

⁴⁷ FAF operations in Afghanistan influenced all the organization in terms of procurement, doctrine, and tactics. As soon as 2002, most of the units included some of the lessons learned in their daily training, and operation Enduring Freedom also had a perceptible impact on the higher levels of the FAF. This is the reason why lessons learned from Afghanistan are part of the model of intervention.

2001, the norm in Africa was to work with regular (former colonial) troops, like foreign legion troops or Troupes de Marine. In the wake of 9/11, France answered the call from NATO and participated in the US-led military operations in Afghanistan. The patterns of operations consisted in the use of Special Forces on the ground, supported by heavy firepower provided by air power. Recognizing the strengths of that approach, the French Air Force quickly developed the concept of ODESSAA (Observation et DEstruction de Sites par l'Arme Aérienne).⁴⁸

Three main reasons explain the decision to link fighter aircraft and Special Forces teams. First, these two elements possess close characteristics, which facilitate their association. They are both highly mobile assets, which provide precision, as well as fast intervention and disengagement capabilities.⁴⁹ The second reason, particular to the French policy toward Africa, is that it involves a small footprint. The first operations in Afghanistan proved it was possible to operate a small contingent of ground troops in support of friendly local forces, using the firepower of attack aircraft to substitute for number. Finally, both are considered as political tools. The chain of command of French Special Forces is very straightforward from the President, and mirror the political role and tight political control of the air force in Africa.

As a historian of French air power in Africa recounts it, airlift and fighter aircraft represent the core of French strategy.⁵⁰ As important as airlift and fighter capabilities are to African operations, however, another platform making significant contributions are FAF helicopters. The next section details their role in African contingencies.

Helicopter Operations

Although French forces used small numbers of helicopters in Africa, these assets provided three important missions: tactical mobility, close air support, and SAR/CSAR.

⁴⁸ ODESSAA stands for "Observation et DEstruction de Sites par l'Arme Aérienne," and was developed by the French Air Forces Special Forces deployed in Afghanistan in 2001. Conceptualised and published in the FAF doctrine in 2006. It was, nevertheless, implemented by all FAF deployed units as soon as 2002. For further details, see Le Saint, "Coopération Equipages-Forces Spéciales dans le Cadre des Missions d'Appui Aérien - Concept d'Emploi Air," *Penser Les Ailes Françaises* April 2007, 110.

⁴⁹ Le Saint, "Coopération Equipages-Forces Spéciales dans le Cadre des Missions d'Appui Aérien - Concept d'Emploi Air," 110.

⁵⁰ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 69-70.

After the Second World War, France was among the first countries which developed the military use of helicopters, particularly during the operations in Indochina and Algeria.⁵¹ France used its colonial experience of the 1950s to develop a smaller scale model of use of helicopters in Africa along these three missions. In the French organization, the Aviation Légère de l'Armée de Terre (ALAT, French Army aviation) operates attack helicopters, the air force is specialized in CSAR missions, and both services are SAR capable. Furthermore, as a normal rule, the number of helicopters usually deployed in operations remains low. It is noteworthy that while the FAF built most of the model of helicopter employments early during the period under scrutiny, it also included some of the lessons learned during the early 2000s and its involvement in operations in Afghanistan, specifically for the SAR/CSAR mission.

The first mission of helicopters in operations is troop transport. Usually, Puma helicopters deploy with ground troops to provide troop transport, like in operation Barracuda in 1979.⁵² In that mission, they provided two major elements: mobility and surprise. They also provided a good capability for medical evacuation.

The French model usually involves small cells of attack helicopters for reconnaissance and CAS when army troops deploy in hostile environments. Their mission is to provide reconnaissance missions, and quick air support, waiting for stronger firepower from the fighters. For example, the French deployed SA-341s to support the three defensive positions in Chad during Manta.⁵³ In the same vein, French Ministry of Defense deployed ALAT Alouette in support of ground troops in Chad in May 1978.⁵⁴ In the early 2000s, the ALAT operated Gazelle helicopters equipped with Anti-Tank guided missiles or 30mm guns.

Helicopters, for the search and rescue (SAR) mission, integrated the latest lessons learned from Afghanistan and the use of special procedures for personal recovery. SAR is a complex mission in Africa and most of the time it is a combined mission between the

⁵¹ Corinne Micelli, "Un Siècle d' Hélicos: Les Rotors du Temps," *Air Actualités* September 2007, 38.

⁵² During this operation, France deployed four Puma helicopters in order to provide its army troops the mobility necessary for fast interventions. For more details, see Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 24.

⁵³ Laborie, *The Diplomacy of the Jaguar*, 14.

⁵⁴ Alouette is a French-made helicopter specifically designed for reconnaissance and CAS missions. Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 35.

transport aircraft and the helicopters. As tankers extended the reach of fighters, the fighter crews needed SAR (or Combat SAR when in enemy territory) in case a pilot bailed out.

Mirroring the fast adoption of the work of fighters and Special Forces, French forces developed the concept of RESAL (Recherche Et Secours AéroLarguée) as a SAR mission.⁵⁵ This concept particularly suits permissive environments where there is a risk of a pilot bailing out in an inaccessible area by helicopter such as Afghan high altitude mountains or African jungle forests.⁵⁶ In that eventuality, a Special Force team including a physician jumps from a C160, meets up with the pilot, and then transports him to a safe area where the helicopters can extract him.

Use of Small Cells

During the second phase of French intervention in Africa (1974-1994), France refined the model of intervention, and centered it on the deployment of small cells. As Lorell contends, “the reorganization and modernization of the home-based exterior intervention forces, [placed] emphasis on the second echelon.”⁵⁷ This model relied on the deployment of one tanker, four fighters, and some transport aircrafts, usually two.⁵⁸

This model has endured up to the current time frame. We can also recognize this concept of operation in the first echelon bases. It is also close to the elements in Chad in first echelon in 2007, as described by Colonel Kerfriden, N’Djamena hosted 6 Mirage F1s [3 Mirage F1CR and 3 Mirage F1CT], one C135FR, 3 C160 Transall, and 2 Puma helicopters from the French Army Aviation.⁵⁹

A normal pattern is to deploy a small number of assets. Among the most important deployments, we find the 12-fighter package employed against Polisario.⁶⁰ In

⁵⁵ French Air Force, "Missions des CPA," (2011), <http://www.defense.gouv.fr/air/activites/unites-au-sol/les-fusiliers-commandos/missions-des-cpa> (accessed 6 February 2011).

⁵⁶ Permissive environments, as contrasted to hostile environment, are situations where the level of threat is relatively low.

⁵⁷ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 12.

⁵⁸ During this phase, the FAF developed the concept of a cell including 4 Jaguars, 2 Transalls and 1 KC135F as the unit of deployment. For further detail, see Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 27.

⁵⁹ Kerfriden, "Puissance Aérienne: Prévention et Gestion des Conflits Contemporains," 41.

⁶⁰ Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 30.

the same vein, France deployed 10 Jaguars against the FROLINAT in April 1978.⁶¹ The most important up to today remains the deployment of sixteen aircraft at Bangui in February 1986, on the eve of the attack on Ouadi Doum.⁶² These three examples represent exceptional circumstances because of the political and operational situations; however, the number of fighter aircraft never exceeds sixteen, with a normal pattern resulting in fewer than eight deployed aircraft.

The analysis of the different historical examples reveals patterns in the use of air assets, including the specific importance of helicopters, fighter, and transport aircraft. This constitutes the last element necessary to build our model.

A MODEL, THREE UNITS OF ANALYSIS

From the 1960s to the early 2000s, France developed a model for the use of airpower in Africa. This model provides us three main units of analysis. The first one deals with the political leadership and includes the political use of air power as a diplomatic tool. This political element, which took the name of air power diplomacy, includes the presence of a clear mandate, the deployment of a small force, and the reliance on a flexible employment of air power under a tight political control.

The second unit of analysis refers to the military organization that translates this political decision into action. It relies on the central role of the CEMA to answer to political decisions quickly and accurately. Through the CPCO, the French military structure relies on four characteristics: uniqueness, strategic watch, openness to the French Ministry of Foreign Affairs, and continuity. At the operational level, its main attribute is its lack of flexibility in C2 structure and operations. Finally, French forces use of deployable C2 structures.

The final unit of analysis refers to the employment of French air assets. From that perspective, the French model emphasizes the use of small cells of fighter, transport aircraft, and a few helicopters, using a two-echelon strategy that relies on a network of prepositioned as well as over-the-horizon forces. The attack aircraft element relies on minimal air superiority capabilities, flexible ground attack and CAS assets, and strong

⁶¹ d'Abzac-Epezy and Lespinois, "Les Interventions Militaires Françaises en Afrique des Années 70 aux Années 90: l'Exemple du Tchad," 54.

⁶² Lorell, "Airpower in Peripheral Conflict: The French Experience in Africa," 51-52.

ISR capabilities. The main characteristic of airlift capabilities is the weakness of strategic assets, and the importance of tactical airlift as the main effort. Finally, deployed in few numbers, the helicopter fulfills the three missions of tactical airlift, CAS in complement to the fighters and SAR/CSAR.

As France changed its patterns of intervention in Africa in the late 1990s and got involved in the coalition operations in Afghanistan in the early 2000s, it furthered the integration of the European Union, becoming with Germany, a co-leader of this integration. When the 2003 crisis in DRC arose, France decided to lead the first military operation of the European Union. Chapter 2 will focus on Artemis and particularly the use of air power during that operation, and compare it to the French model.



Chapter 2

ARTEMIS 12 June-1 September 2003

Your mission is historic because it is the first autonomous mission of the European Union. It marks, and will mark in the future, the actual time of the creation of the European defense.

- Michelle Alliot-Marie, French Minister of Defense (2 August 2003)

In June 2003, as world opinion focused on operations in Iraq, the European Union launched its first autonomous military operation in support of the United Nations. Operation Artemis was also the first mission out of area -- outside the European continent -- as it took place in Ituri, the Northeastern province of the Democratic Republic of Congo. Three months later, the European Union was proud to complete successfully its mission, having restored security in Bunia, and transferred back the responsibility of the area to the UN operation, the MONUC.¹

This operation proved itself very similar in operations concept to the French model discussed in Chapter 1, resulting from the "Europeanization of an initially French-led operation."² As a preliminary, this chapter first reviews the background of the operation. This section does not aim at providing a detailed description of the operation, but rather serves to extract the elements relevant to our study.³ Then, it compares the use of air power during operation Artemis with the three units of analysis of the French model. Finally, it assesses the adequacy of the operation to the model.

BACKGROUND OF OPERATION ARTEMIS

The UN launched an operation in the Democratic Republic of the Congo under the name MONUC in 1999. The DRC was a country where the wealth in natural resources

¹ Jean-Sylvestre Mongrenier, "Redéploiement Géostratégique et Projection de Puissance Euro-Atlantique en Afrique Sub-Saharienne," *Tribune*, no. 12 (July 2007): 5-6.

² *European Security and Defence Policy: The First Ten Years (1999-2009)*, 182.

³ For a detailed summary of the operation, see United Nations Peacekeeping, "Operation Artemis: The Lessons of the Interim Emergency Multinational Force," (October 2004).

contrasted fundamentally with its political instability, and the MONUC seemed to make little progress.⁴

The security situation degraded quickly in Ituri in April 2003, and interethnic violence broke out between Hemas and Lendus militias.⁵ The small UN force, the MONUC, was unable to respond because its mandate was too limited and its troops insufficient in number and capability.⁶

The UN Secretary General, Kofi Annan, called for the reinforcement of the UN mission, which became popularly known as MONUC 2. He also called for a strong multinational force to restore security before new troops could reinforce the MONUC. This multinational force, separate from the MONUC, would be called the Interim Emergency Multinational Force.⁷ On 30 May 2003, the UN Security Council adopted the Resolution 1484 under Chapter VII of the UN chart.⁸ France answered that call and launched its own operation under the name *Operation Mamba*.

Soon the idea of an EU operation flourished. Because of the international situation, there was a strong political will to intervene without the United States and outside the NATO framework and the "Berlin-Plus agreements."⁹

⁴ The region had been the place of interethnic violence, militia fighting, and interstate conflicts between Rwanda, Uganda, and DRC. The Ituri Pacification Commission, under the aegis of the MONUC, seemed to make progress. For more details, see Paraschos Lianos, "European Strategic Culture: Assessing the ESDP Years (1998-2005)" (University of Leicester, April 2008), 205.

⁵ According to the Pretoria agreements (July 2002) and the Luanda agreements (September 2002), the Rwandan and Ugandan troops agreed to withdraw from Ituri. After the latter withdrew in April 2003, the Hemas and Lendu militias used this security vacuum to forfeit responsibility for massacres. For further details, see Sébastien Loisel, "Les Leçons d' Artémis: Vers une Approche Européenne de la Gestion Militaire des Crises?," *Les Champs de Mars* 2004, 72.

⁶ 700 Uruguayan peacekeepers were stationed in Ituri before Operation Artemis began; however, their limited mandate prevented them to secure the area and contain the tribal violence. For further details, see Gérard Gaudin, "Artemis: Europe's First Operation in Africa," *Air Forces Monthly* November 2003.

⁷ United Nations Security Council, "Security Council Resolution 1484 (2003) the Situation Concerning the Democratic Republic of the Congo," (30 May 2003), Art. 1.

⁸ As a condition set up by France to intervene was the need for the right to use force to implement the UN resolution. United Nations Security Council, "Security Council Resolution 1484 (2003) the Situation Concerning the Democratic Republic of the Congo."

⁹ The EU and NATO agreed on the use of NATO command structures for EU operations, even when non-NATO countries participate. These agreements are labeled "Berlin-Plus." However, in order to show its operational status and ability to operate without NATO help, Operation Artemis took place with only EU and EU-nations' assets and command structures. For further details, see Mongrenier, "Redéploiement Géostratégique et Projection de Puissance Euro-Atlantique en Afrique Sub-Saharienne," 5.

POLITICAL AND OPERATIONAL CONTEXT

As requested by France, the UN mandate “had to be limited in time and scope.”¹⁰ As lead country, France required it be a short mission with a clear mandate. The UNSC decided to delimit the duration of the operation between 12 June and 1 September 2003. As France considered excessive the number of troops necessary to control the entire region, the UNSC decided to limit the area of operation to the capital of the region; therefore, the mandate focused on the city of Bunia (see Annex B). The objective of the operation was to allow a safe deployment of the following force of MONUC 2. As the EU endorsed the UN mandate, France became the framework nation for the operation.¹¹

The force faced a complex situation. As emphasized by General Neveux, the force had to restore security in an operational context marked by militias’ violent acts and warlords using child-soldiers.¹²

Geography and weather also played a huge role in shaping the character of operation Artemis. The specific geography of Ituri molded the operational landscape, and particularly highlighted the importance of air power. Ituri is the northeastern province of the DRC. Bunia is a remote city located at 1700 kilometers from the capital city, Kinshasa. Bunia’s unique access is its airport, which General Neveux, the operation commander, described as a “bottleneck.”¹³ Operating at 6000 kilometers from Europe would also constitute a challenge for European forces, designed as static forces facing the Soviet bloc and operating in the European environment, close to their supply lines.¹⁴ Finally, the 1800 meter-long runway of Bunia did not allow the landing of jumbo-jets, and French and British engineers had to repair it after each tactical aircraft landing.¹⁵

At this period of the year, the region, just north of the equator, would be under the influence of the inter-tropical front (ITF), bringing thunderstorms and low clouds, nearly

¹⁰ Lianos, "European Strategic Culture: Assessing the ESDP Years (1998-2005)", 207.

¹¹ In this model, "a 'lead nation' or 'framework nation' takes operational command [...] and provides the bulk of the forces on the ground." for further details, see Lianos, "European Strategic Culture: Assessing the ESDP Years (1998-2005)", 193-194.

¹² General Bruno Neveux, "Vers une Union Opérationnelle? Artémis," *Défense Nationale* May 2004.

¹³ Neveux, "Vers une Union Opérationnelle? Artémis," 18.

¹⁴ Neveux, "Vers une Union Opérationnelle? Artémis," 15.

¹⁵ Bernard Bombeau, "Opération Artémis: Le Défi de la Logistique," *Air & Cosmos* 26 September 2003, 38-39.

every day. This weather pattern influenced particularly the missions flown from Chad that had to cross the ITF twice for each round trip. That would trigger a later decision to deploy more forces in Uganda. Finally, as planned, on 1 September 2003, the 16 countries involved in Ituri ended Operation Artemis and handed over the area to the UN troops.¹⁶

In such a context, how did the EU use of air power evolve according to the French model? While, the building of the model used a top-down approach, from political to tactical, to answer this question, the comparison to the model uses a bottom-up approach, from tactical to political. Therefore, the employment of air assets is the first unit of analysis under scrutiny.

EMPLOYMENT OF AIR ASSETS

Given the operational and political factors, and particularly the predominance of French staff officers in the command structures, as well as the French services providing the bulk of the force, we should expect a close match between the employment of air assets during operation Artemis and our model. To establish the comparison, this section reviews the four elements established in the model. Three of them are explicit: airlift, attack and reconnaissance aircraft, and helicopter operations, while the study of the employment (including the two-echelon strategy and the use of small cells) is a guiding thread throughout the section.

Airlift Operations

First under examination is the use of airlift capabilities during operation Artemis, which proved generally consistent with the French model. The only deviation from the model was the use of C130s as the predominant tactical airlift assets, in opposition to the French model that used C160s. This deviation from the model results from an operational factor. Indeed, the choice of the C130 rested on three criteria: the necessity to operate a standard aircraft (Canada, Belgium, Brazil, and the UK operated C130s and did not own C160s), the presence of a runway (though in bad shape) in Bunia whereas

¹⁶ Austria, Belgium, Brazil, Canada, Cyprus, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Portugal, South Africa, Spain, Sweden, and the United Kingdom. United Nations Peacekeeping, "Operation Artemis: The Lessons of the Interim Emergency Multinational Force," 4.

the C160s would be the predominant choice for landing on makeshift runways, and the ability of the C130s to deliver more freight.¹⁷ The other characteristics of French operations – weak inter-theater capabilities and importance of tactical airlift- were present.

The EU forces suffered from the same chronic weakness in strategic airlift assets as the French. Because of the lack of strategic airlift, countries had to contract with civilian airlines, and used Ukrainian Antonovs An-124s flying supplies from Europe.¹⁸ Political independence had a price. Because the EU countries wanted to operate outside the US and NATO framework, they had to contract nearly one hundred commercial flights with An-124 and B747.¹⁹ Europe demonstrated a consistency with the French model on this weakness on strategic airlift assets.

As expected in the model, tactical airlift assets conducted operations around-the-clock, maximizing payload and taxing aircrew.²⁰ After the “opening of the door” with French Special Forces on 6 June 2003, the tactical airlift assets delivered, in just three days, more than 350 troops and their essential support supplies (food, vehicles, and munitions) in Bunia.²¹ The EU forces reproduced the same pattern to disengage the force, and set up an aerial bridge, moving the other direction.²²

When the first strategic transport aircraft left France on 6 June 2003 headed to Entebbe (Uganda capital’s airport), it proved to be an incredible challenge to project and sustain a force 6000 km from Europe.²³ Because of the small airfield in Bunia, operation planners decided to use Entebbe as a Joint Advanced Operational Logistic Base.²⁴ Strategic airlift assets landed in Entebbe and, from there, tactical aircraft (C160 and

¹⁷ Both Canada and Belgium sent 2 C-130s to sustain the operation. The UK and Brazil participated with C-130s, but not during the entire period. For further details, see Eugénie Baldes and Marie-Aline Romagny, "Mamba-Artemis," *Air Actualités* July 2003, 7.

¹⁸ Gaudin, "Artemis: Europe's First Operation in Africa," 29.

¹⁹ While An124s airlifted material, several nations used also B747 for the transport of troops between Entebbe and Europe. Bombeau, "Opération Artémis: Le Défi de la Logistique," 40.

²⁰ Bernard Bombeau, "L' Europe Donne ses Ailes à "Artémis"," *Air & Cosmos* 27 June 2003, 47.

²¹ "Ouverture de porte" (Opening the door) is the specific name used by French special forces when securing a facility (beachhead or airport) in a hostile environment to allow follow-on force to enter the area. For further details, see Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," 39-40.

²² Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," 50.

²³ Antoine Canard, "L' Europe a Déployé une Force Intérimaire d' Urgence à Bunia," *Air Actualités* August 2003, 4.

²⁴ Gaudin, "Artemis: Europe's First Operation in Africa," 29.

C130) took the relay and delivered troops and goods to Bunia via its small airfield. With this system, airlift assets were able to supply the 80 to 100 tons of freight per day needed in Bunia.²⁵

Attack and Reconnaissance Aircraft and their Support

Second, the use of fighter aircraft and their support assets were consistent with the French model. Actually, the parallel to the model stemmed from the fact that they were all French assets. Air superiority remained unchallenged throughout operation Artemis, and the European Union did not have to deploy air superiority assets.

Fighter aircraft provided support to EU troops along two phases. Both phases reflected the normal patterns of the French Air Force and included the latest lessons learned from Afghanistan, particularly the flexibility of CAS assets and the predominance of ISR assets. From the onset of the operation, fighter aircraft operated from N'Djamena. Consistent with the normal French model, the prepositioned Mirage F1s flew the first missions and, soon, five M2000D with their C135FR joined them. These tanker aircraft were stationed in Libreville (Gabon). Meeting in flight with the fighters, they performed long-range missions.²⁶

Constraints on men and machines, as well as operational factors, forced the JFACC to redeploy fighter assets closer to the theater. In July, he deployed four Mirage F1CRs to Entebbe.²⁷ The JFACC decided to keep three Mirage 2000D as a reserve in N'Djamena for all weather as well as day-night bombing missions. These assets never flew a mission for operation Artemis again. With Mirage F1CRs located 300 km from them, troops in Bunia could rely on a 30 minute CAS alert.²⁸ It also reduced the fatigue of the pilots and crews. Finally, the Mirage F1CR could perform reconnaissance

²⁵ Bombeau, "L'Europe Donne ses Ailes à "Artémis", " 47.

²⁶ The Mirage 2000D had to fly 7 hours to stay on station over Bunia 2 hours, and the Mirage F1, flew regularly 6 hours, with less than one hour on station. For further details, see Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," 43.

²⁷ Two Mirage F1CRs coming from France joined the two Mirage F 1CRs previously prepositioned in N'Djamena.

²⁸ Canard, "L'Europe a Déployé une Force Intérimaire d'Urgence à Bunia," 7.

missions.²⁹ At this point, C135FRs in Libreville kept the alert for the Mirage 2000D, and one C160 NG Transall deployed in Entebbe in order to refuel the Mirage F1CRs.

The work with the ground forces was also consistent with the French model. Because of the limited mandate, and the limit imposed on the size of the force for political and logistical reasons, fighter aircraft performed CAS missions in support of the Special Forces. They worked directly with teams from the 10th Commando de l'Air Parachutistes (CPA10).³⁰ The coordination of Special Forces operations and fighter aircraft shows of force in low level expressed the resolve of the force.³¹

Finally, consistent with the French model, the French Navy deployed an Atlantic 2, as an ISR collector, radio relay and airborne command post.³²

Helicopter Operations

Third, the use of helicopters remained consistent with the French model on two criteria: CAS/Reconnaissance and SAR/CSAR. Indeed, helicopters involved in the operation did not perform tactical airlift because the area of operation was small and did not justify the use of this means.

During Artemis, the use of helicopters was on a small scale but extensive according to the spectrum of missions covered. French Army Aviation deployed two Gazelle helicopters in Bunia. One was equipped with air to ground HOT missiles and the second with guns.³³ As described by Guhl, these helicopters flew CAS and reconnaissance missions with the ground troops.³⁴

The SAR/CSAR missions involved the teams of two South African Oryx and two French Puma based in Bunia and Entebbe.³⁵ The Puma also operated during the first month of the operation along the ones in N'Djamena to guarantee the SAR of pilots in

²⁹ Operation Artemis was the first deployment of the new reconnaissance pod, PRESTO, under the Mirage F1CR.

³⁰ Philippe Wodka-Gallien, "The Tricolor Aloft: French Air Force Operations in 2003," *The Journal of Electronic Defense* March 2004, 57.

³¹ Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," 41.

³² Wodka-Gallien, "The Tricolor Aloft," 58.

³³ The HOT missile (Haut subsonique Optroniquement Téléguidé) is a missile designed to target armor vehicles and performs well against light vehicles and non-hardened buildings.

³⁴ Jean-Michel Guhl, "L' ALAT dans l' Opération Artémis en RD Congo," *Air Zone* September 2003, 10.

³⁵ Promé, "Opération Artémis: Succès Complet pour L' Union Européenne," 45.

case of bail out during the transit between N'Djamena and Bunia. This organization, also involving the two C160s prepositioned in Chad, used the RESAL concept developed in Afghanistan in early 2002.

Operation Artemis was very close to the French model for the use of air assets at the tactical and operational levels. The only divergence from the model - using C130 instead of C160 as the predominant tactical airlift assets, and not using helicopters for troop transport- resulted mainly from operational factors. Otherwise, all other elements (the important but small helicopter contribution, the preponderant role of fighters and tactical airlift, and the weakness of strategic airlift) were consistent with the model. Next section studies the second unit of analysis, the military organization.

PLANNING, COMMAND AND CONTROL

The second unit of analysis, the planning as well as the command and control structures, also mirrored the French model, and French influence reached all levels. As Kees Homan reminds us, "while [operation Artemis] ultimately received an EU badge, its origin, command and control were French."³⁶ Because France went from lead-nation to framework-nation, the preparation phase of operation Artemis showed the same continuity between strategic watch, planning, and execution as in the French model.³⁷

At the political level, the EU Political and Security Committee (PSC), constituted with the ambassadors from the 15 countries fixed the political objectives.³⁸ It placed the force under the command of two French generals: the Operation Commander was Major General Bruno Neveux, and the Force commander was Brigadier General Jean-Paul

³⁶ Kees Homan, "Operation Artemis in the Democratic Republic of Congo," in *Faster and More United ? The Debate About Europe's Crisis Response Capacity*, ed. European Commission (Luxembourg: OPOCE, May 2007), 151.

³⁷ President Chirac agreed with UN Secretary General Kofi Annan to take the lead of a multinational force on 11 May 2003. The idea of a European operation came later. Neveux, "Vers une Union Opérationnelle? Artémis," 20.

³⁸ In 2003, there were only 15 member states of the European Union. They are 27 since 2007 when Bulgaria and Romania joined the Union.

Thonier.³⁹ As General Neveux contends, it was an entirely European chain of command, but with France as the framework nation.⁴⁰

At the strategic level, it was the first time the EU set up an OHQ for an operation.⁴¹ This OHQ remained under French influence. Stationed at Paris, it was co-located but separate from the CPCO.⁴² However, as 60% of the staff was French and as the other EU staff officers joined it, pre-planning had already occurred. The continuity between planning and execution resulted, as in the French model, because the same officers planned and conducted most of the operation.

At the operational level, the rate of French officers was even higher than at the strategic level, as French officers represented 80% of the FHQ.⁴³ This explains why French methods influenced the use of assets. General Neveux also describes one interesting element concerning the FHQ. He decided to divide it between a main HQ in Entebbe (Uganda), and a forward element in Bunia (DRC).

Specific to the air component, the force commander established a Joint Force Air Component Command Center (JFACC) and co-located it with the FHQ in Entebbe.⁴⁴ Finally, an Air Operations Coordination Center (AOCC), co-located with the forward HQ in Bunia, ensured the coordination with the troops. France provided all the deployable means and staffed most of these structures, mirroring the French model of deployable C2 structures.

Finally, as in the French model, the structure allowed for a decentralized execution with lots of freedom to the Force commander.⁴⁵ General Neveux recognized the great freedom of action granted to implement his military strategy.⁴⁶

³⁹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 183.

⁴⁰ General Bruno Neveux, "Command and Control for Operation Artemis," *Doctrine Tactique* December 2004, 68.

⁴¹ Bruno Neveux, "Le Témoignage du General de Division Bruno Neveux," *Doctrine* December 2010, 58.

⁴² General Bruno Neveux, "Command and Control for Operation Artemis," *Doctrine*, no. 05 (December 2004): 68.

⁴³ Neveux, "Command and Control for Operation Artemis," 69.

⁴⁴ Neveux, "Command and Control for Operation Artemis," 69.

⁴⁵ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 184.

⁴⁶ Neveux, "Le Témoignage du General de Division Bruno Neveux," 59.

Marked with the French predominance in its command structures, Operation Artemis was in line with the model developed in Chapter 1. The next section studies the last parameter, the use of air power as a diplomatic tool.

AIR POWER AS A POLITICAL TOOL

The political dimension of the mission and its importance as the first EU operation eclipsed the use of air power as a political tool. However, air power during operation Artemis was a diplomatic tool. Beyond the firepower they brought to the fight, the use of fighter aircraft reproduced the long tradition of French intervention. Their presence showed the resolve of the EU commanders to use force if needed. The deployment of Mirage 2000Ds and the use of the prepositioned Mirage F1s resulted from the French initial planning. Actually, as soon as 6 June, Mirage F1s flew in support of the French Special Forces assault on Bunia.

Moreover, the European force relied on a clear mandate from the UN. With the combination of its experience during previous operations and the difficulties of the MONUC to enforce the UN resolutions, France insisted that the UN mandate included the use of force to restore security in the area.

Artemis military commanders also relied on the flexible employment of air power as a diplomatic tool. Two specific events express well this mindset. First, the choice of assets to deploy in Entebbe, in July, reflected this political dimension. The Operation Commander judged the Mirage 2000Ds, using only bombs as ordnance, as too threatening for the situation on the ground, and kept them as a reserve in N'Djamena. The Mirage F1CR armed with guns, but labeled as reconnaissance assets were the only fighters deployed close to Bunia. The Force Commander also used the political dimension and the deterrent effect of air power during his negotiations with local leaders.⁴⁷ Military leaders considered the choice of assets to deploy and their use at key moments during negotiations from a political point of view, beyond their tactical military use.

⁴⁷ Wodka-Gallien, "The Tricolor Aloft," 58.

Finally, consistent with the predictions of the model, the use of air power in combination with Special Forces allowed deploying a force of a small size. In that regard, only 1850 troops deployed between Entebbe and Bunia.

The study of the third and last unit of analysis shows a similarity between the use of air power during Operation Artemis and the French model. It allows us to conclude about the adequacy to the whole model.

ARTEMIS: A CLOSE MATCH TO THE MODEL

Operation Artemis was a wonderful success and one more step toward the building of a common European security and defense policy, but it was not a pure European operation. It was a French operation with a flavor of Europe. Therefore, as expected, the use of air power during Artemis induced a minimal deviation from the French Model. At the political level, the European Union provided a clear mandate, and air power remained a political tool. The reliance on its flexible employment allowed for the deployment of a small force in the region of Bunia.

The military organization expressed the taste of the previous French-led, French-centric operations, as France provided most troops, most of the staff officers and the highest commanding officers. As Pierre Pascalon explains, the quick reaction to the crisis, and the fast deployment of the troops (less than 14 days) after the decision resulted from the concept of lead-nation, with prepositioned forces already in the region.⁴⁸

Finally, consistent with the French Model, Artemis forces experienced the expected shortfalls in transport aircraft, particularly at the inter-theater level and the logistical link with Europe. Unable to ask help from the United States for political reasons (risking assimilation of the force into a NATO operation and showing the weaknesses of EU defense capabilities) the forces had to compensate with contracting civilian companies. In addition, the use of fighter aircraft remained consistent with the French model, and involved the latest innovations from Afghanistan.

Even though the operation lasted only four months, as Sebastien Loisel contends, the political dimension of Artemis largely exceeded the length of the operation.⁴⁹

⁴⁸ Pierre Pascalon, ed., *La Politique de Sécurité de la France en Afrique* (Paris: L'Harmattan, 2004), 34.

⁴⁹ Loisel, "Les Leçons d'Artémis: Vers une Approche Européenne de la Gestion Militaire des Crises?," 70.

However, several questions remained unanswered at the end of the operation. In particular, several observers of the EU development wondered about the importance of France, and the ability of the European Union to intervene without such an important French contribution.⁵⁰ The EU would return to the DRC in 2006 with a different mandate and for a different purpose. This would provide answers to some of these questions and a second opportunity to test the model.



⁵⁰ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 184.

Chapter 3

EUFOR RD CONGO 30 July-30 November 2006

The European Union had worked very hard for a number of years to facilitate a democratic transition in the Democratic Republic of Congo. Elections were the key to final success. We could not fail and we answered positively to the UN request to put soldiers on the ground... We can state the mission has been a success.

- Javier Solana (9 January 2007)

Three years after the end of operation Artemis, the European Union launched a new military operation in the Democratic Republic of Congo, operation EUFOR RD Congo. The dynamics and unique characteristics of this operation provide a platform to test our model. Three are specifically relevant to our study. First, compared to operation Artemis, EUFOR RD Congo was a “real” European operation, from the planning phase to its execution. Second, EUFOR RD Congo was not a response to a crisis, but deployed a peacekeeping and deterrent force with planning spanning over seven months. Finally, EUFOR RD Congo was not a stand-alone operation, but provided a temporary reinforcement to the MONUC, with which it coexisted in the field.

Therefore, though EUFOR RD Congo answers to the definition of a limited military operation, it is hard to predict if the operational differences will result in a difference from the model. Furthermore, while France provided the bulk of the force, the presence of French officers at the OHQ was minimal.¹ That might have reduced the French influence on the strategy of the European Union, and therefore reduced the possible adequacy of the model. Following the pattern established in Chapter 2, this chapter first reviews the background of the operation and extracts the relevant political

¹ France provided to EUFOR RDC 1000 of its 2400 troops. France also set up the Force headquarters in Kinshasa, however France only assigned 20 French officers to the operational headquarters in Potsdam. For further details, see "Opération Benga: Les Forces Spéciales en République Démocratique du Congo," *Air Actualités* April 2007, 41.

and operational factors.² Then, it compares the use of air power during operation EUFOR RD Congo with the three units of analysis of the French model. Finally, it assesses the adequacy of the operation to the model.

BACKGROUND OF OPERATION EUFOR RD CONGO

Following operation Artemis, the European Union remained involved in the DRC. Showing its interest for the African continent, the European Union developed and published a strategy for Africa in October 2005.³ It also initiated two civilian operations to help the Congolese government promote security in the country. Starting in April 2005, the European Union started a police mission in Kinshasa, operation EUPOL Kinshasa, in order to train an Integrated Police Unit (IPU).⁴ The following month, the European Union launched operation EUSEC RD Congo supporting the process of integrating the Congolese army.⁵

These two operations were ongoing when the EU received a 17 December 2005 letter from the UN Under-Secretary-General calling for a force that would support the MONUC during a historical event for the DRC and the Great Lakes region: its first democratic elections in 45 years.⁶ Since Artemis, the MONUC had strengthened its force

² For a detailed summary of the operation, refer to *European Security and Defence Policy: The First Ten Years (1999-2009)*, 311-323.

³ The Commission of the European Communities highlighted the importance of the African continent in the European strategy and the need to develop partnership that would benefit both sides of the Mediterranean Sea. It also emphasized the long-term involvement necessary to strengthen the bonds. It identified peace and security as the first prerequisites for further development, and defined political, economic, and social measures for cooperation. For further details, see Commission of the European Communities, "EU Strategy for Africa - Towards a Euro-African Pact to Accelerate Africa's Development," (12 October 2005).

⁴ EUPOL Kinshasa aimed at training 1008 Congolese policemen in order to guarantee the security of the government and transitional institutions. For further details, see EU Council Secretariat, "Press Release: EU Support to the DRC During the Election Process," (June 2006), http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/esdp/90508.pdf (accessed 6 October 2010).

⁵ Operation EUSEC RD Congo mission was to "provide advice and support for army integration in a way that was compatible with principles of good governance, human rights, international humanitarian law, democratic standards, transparency and the respect of the rule of law." For further details, see *European Security and Defence Policy: The First Ten Years (1999-2009)*, 243-254.

⁶ UN Under-Secretary-General for Peacekeeping Operations, "Letter to the Secretary of State for Foreign and Commonwealth Affairs of the United Kingdom and Northern Ireland," (27 December 2005).

and numbered almost 17,000 troops in Congo.⁷ It had mainly deployed the bulk of its force in the eastern and northeastern parts of the country.⁸ However, the perspective of the elections entailed some risks. As Denis Tull emphasized, the fact that “the principal candidates came from former warring groups... and still controlled armed troops... increased [the] risk of conflict before, during, and after the vote”⁹ Therefore, the European force would primarily be a “deterrent force in order to prevent and, when necessary, contain acts of violence in the capital.”¹⁰

As a condition for its participation, the European Union requested a strong mandate. The UN Security Council adopted Resolution 1671 on the 25 April 2006, which authorized the deployment of a European force, EUFOR RD Congo, to support the MONUC.¹¹ The EUFOR reached its full operational capability on 30 July 2006, the date of the first round of the presidential and parliamentary elections.¹² That day marked the official beginning of the operation. The second round of the elections took place on 29 October, and the final publication of the results on 15 November. The operation ended as planned four months after its initiation, on 30 November 2006. Winning over his main contender and vice-president Jean-Pierre Bemba, Joseph Kabila became the first democratically elected DRC President and took his oath of office on 6 December 2006.

POLITICAL AND OPERATIONAL CONTEXT

Finding a framework nation for the operation was the first political factor that would shape the operation. France led the previous one, operation Artemis, and did not want to lead this one.¹³ The United Kingdom was involved in operations in Iraq and

⁷ Idriss Al Rifai and Joanna Scott, "Premier Bilan de L'opération EUFOR RDC," *Défense Nationale et Sécurité Collective* January 2007, 49.

⁸ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 10.

⁹ Tull, "EUFOR RD Congo: A Success, but Not a Model," 46.

¹⁰ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 5.

¹¹ United Nations Security Council, "Security Council Resolution 1671 (2006) the Situation Concerning the Democratic Republic of the Congo," (25 April 2006).

¹² Nicholas Fiorenza, "EUFOR Reaches Full Capability in the DRC," *Jane's Defense Weekly* 9 August 2006, 19.

¹³ Al Rifai and Scott, "Premier Bilan de L'opération EUFOR RDC," 52.

Afghanistan, and could not afford to spread itself too thin.¹⁴ Under political pressure, Germany accepted the framework-nation leadership role, and set up the operation headquarters in Potsdam. Actually, Germany did not have much choice as they already committed troops to the operation and, as Helmut Fritsch suggests, “Germany was the only country without an argument why it should *not* provide the OHQ” (emphasis in original).¹⁵

Another key element of the operation consisted in the EU’s strategy to station most of the troops outside the DRC. The intent was to “simultaneously ensure a deterrent capacity while avoiding unnecessary heavy military presence in Kinshasa.”¹⁶ Therefore, military planners designed a strategy relying on three elements.¹⁷ First, the EU deployed an advanced element of one thousand one hundred troops in Kinshasa. The second consisted of “on-call” forces stationed over the horizon. Neighboring Gabon hosted these one thousand three hundred troops. The bulk of this force was in Libreville (Gabon’s capital city), which also hosted the airlift component. There, EU forces used the facilities of the prepositioned French units. A Special Forces’ autonomous element, including its own airlift component, resided in Port Gentil. Finally, the European Union kept a strategic reserve of one thousand five hundred troops in France and Germany.

Three operational factors influenced operation EUFOR RD Congo. First, the European Union deployed its forces in support of the MONUC, however, the forces operated in different parts of the country. The MONUC mission with its 15,000 troops in the eastern part of the country kept that region under its exclusive monitoring (See Annex C).¹⁸ The EUFOR decided to focus on Kinshasa and planned intervention in the rest of

¹⁴ Thomas Ferenczi, “L’UE Peine à Mettre sur Pied une Opération Militaire au Congo,” *Le Monde* 19 February 2006, 7.

¹⁵ Quoted in Tull, “EUFOR RD Congo: A Success, but Not a Model,” 48.

¹⁶ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 314.

¹⁷ According to different sources, the apportionment of the 2400 European troops between the DRC and Gabon varies. This study will use the average and round figures of 1100 troops in the DRC capital and 1300 troops in Gabon, which seems to best represent the tendency of the apportionment. For further details, see International Crisis Group, “Securing Congo’s Elections: Lessons from the Kinshasa Showdown,” no. 42 (2 October 2006), <http://www.crisisgroup.org/en/regions/africa/central-africa/dr-congo/B042-securing-congos-elections-lessons-from-the-kinshasa-showdown.aspx> (accessed 14 March 2011).

¹⁸ Fiorenza, “EUFOR Reaches Full Capability in the DRC,” 19.

the DRC only on MONUC's request.¹⁹ While the relations between the two entities remained good, the coordination between their actions proved challenging during the entire operation, adding friction to the execution of the mission.²⁰

Second, as during operation Artemis, geography was the most important operational factor as it emphasized the importance of air power. Operating at more than 6,000 km from Europe, and relying on two bases separated by 800 km, distance resulted in over-extended lines of communications. Given the underdeveloped land network, air power undergirded most of the logistical effort. However focused on Kinshasa, the area of responsibility of the European force was huge, and the three-level strategy emphasized the need for solid airlift capability to deploy forces in case of crises.

Finally, EUFOR RD Congo was limited in duration. As one of the conditions for Germany leading it, the operation had to be limited to four months, beginning with the day of the first round of the elections.²¹ The force was supposed to cover the election days, and the publications of the results. Even as the date of the second round slipped, the end of the operation remained the same.²²

Events challenged the effectiveness of the EU forces when riots broke out after the publication of the results of the first round of elections. On 20 August, forces of Joseph Kabila (President and candidate) attacked Jean-Pierre Bemba's headquarters (Vice-President and candidate for presidency). During the two days of confrontations, the EU force evaluated civilian casualties to twenty-three persons killed, and forty wounded.²³ On this occasion, the EUFOR deployed some of its reserve troops from Gabon. As Lieutenant General Damay reminds us, this critical intervention of the EU

¹⁹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 315.

²⁰ As Richard Gowan emphasizes, though EUFOR RD Congo set an interesting precedent for future EU-UN cooperation, tensions during the planning process, for the sharing of documents, or for the generation of threat assessments remained during the entire operation. For further details, see Richard Gowan, "EUFOR RD Congo, UNIFIL and Future European Support to the UN," in *The EU's Africa Strategy: What are the Lessons of the Congo Mission?* (Security & Defense Agenda Discussion Paper 7 March 2007), 30.

²¹ Tull, "EUFOR RD Congo: A Success, but Not a Model," 51.

²² Resisting to the pressure from France and Belgium who both wanted to extend the mandate of the force, Germany opposed to a new resolution. For further details, see Bjørn Olav Knutsen, "The EU and the Challenges of Civil-Military Coordination at the Strategic Level," 25 September 2008, 47-48.

²³ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 10.

forces contributed to the restoration of security, strengthened their legitimacy and their impartiality, and allowed the continuation of the electoral process.²⁴ As the study of the operational factors emphasized the importance of air power in the European strategy, the next section studies how it translated in the field and how EUFOR RD Congo used its air assets.

EMPLOYMENT OF AIR ASSETS

Airlift Operations

Consistent with the French model, EU strategic airlift capabilities showed the same weaknesses in spite of the interim system already set up. Similar to the 2003 Artemis operation, the European Union could not use NATO or US airlift capabilities without damaging the perception of its ability to conduct an autonomous EU mission. Sixteen EU countries had launched in 2003 the Strategic Airlift Interim Solution (SALIS) as a temporary organization set up to increase the heavy transport airlift capabilities of member countries.²⁵ The EUFOR used the SALIS mechanism and relied on its Strategic Airlift Coordination Center in Eindhoven (The Netherlands) to coordinate the flights between Europe and Africa.²⁶ However, even if the better coordination improved the situation, the contribution of SALIS was not sufficient to sustain even the modest force of 2400 troops deployed in Gabon and the DRC.²⁷

The use of tactical airlift remained consistent with the French model for the operational use but, contrary to the French model, political restrictions limited its effectiveness. First, the strategy, as set up, relied heavily on the use of tactical airlift. In case of a crisis, these assets would be responsible for the deployment of the 1300 troops from Gabon, and eventually for the redeployment of the 1100 troops already in Kinshasa to other areas of the DRC. Countries provided eight tactical transport aircraft for

²⁴ Lieutenant General Christian Damay, "La Contribution de l'UE à la Sécurité du Processus Electoral en République Démocratique du Congo," *Les Cahiers de Mars* 2007, 89-90.

²⁵ In 2006, 16 countries were leasing six An-124 in the context of the SALIS agreement. For further details, see North Atlantic Treaty Organization, "Strategic Airlift Interim Solution (SALIS)," http://www.nato.int/cps/en/natolive/topics_50106.htm.

²⁶ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 22.

²⁷ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 314-316.

operation EUFOR RD Congo: two C160s and five C130s originated from the EU member states and Turkey provided a C130.²⁸

Second, the final force generation revealed that EUFOR RD Congo was short by two aircraft from the initial plan.²⁹ Therefore, it could not ensure the 24-hour deployment of the strategic force anywhere else than Kinshasa.³⁰ The deployment of a significant force outside Kinshasa could take up to 72 hours, which was not compatible with the mission.³¹

Third, some countries placed their assets under restrictive political constraints. For example, Germany restricted the use of its two C160s between Libreville and Kinshasa.³² It specifically meant that other countries would have to sustain troops outside Kinshasa. Furthermore, in case of events outside the Congolese capital city, other assets than German ones would be put at risk.

Finally, the force experienced the new concept of a multinational Special Forces unit. It was not a real deviation, but a variation from the model because the helicopters performed the same missions and remained in low numbers. The EU deployed a Special Operations Forces (SOF) unit into Port Gentil. This unit was autonomous regarding its air assets. This deployment operated one Swedish C130 and four French helicopters: two EC725 Puma in their tactical airlift mission for troop transport, and two Gazelle helicopters configured for the CAS mission.³³

Attack and Reconnaissance Aircraft and their Support

The use of a small cell of fighter aircraft coming from a forward basing facility remained consistent with the model. France committed a cell of three Mirage F1CRs and one C135FR to the operation EUFOR RD Congo. It used its prepositioned aircraft in

²⁸ The Turkish C130 was based in Europe.

²⁹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 316.

³⁰ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 22.

³¹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 316.

³² Dominique Simonet, "EUFOR, de Potsdam à N'dolo" *LaLibre.be* (6 November 2006), <http://www.lalibre.be/actu/international/article/311673/eufor-de-potsdam-a-n-dolo.html> (accessed 15 October 2010).

³³ "Ouverture de Porte en RDC: Les Forces Spéciales Passent à l' Action," *Air Actualités* April 2007.

N'Djamena. Planners assigned two missions to these fighters. First, the Mirage F1CRs performed mainly reconnaissance missions, providing imagery to the European forces.

Second and most importantly, the fighter aircraft assured deterrence for the EUFOR.³⁴ On 27 July, two days after their deployment, two Mirage F1CRs performed a highly advertized show of force in Kinshasa. However, local political leaders used that mission for their own political messages.³⁵ Therefore, to avoid such incidents, the Operation Commander restricted further over flight of the city by fighter aircraft.

Though the use of attack aircraft remained consistent with the model, the main deviation from the model resulted from the timeline of their deployment. While the model would have predicted the presence of these fighters during the entire operation, they only performed two short deployments in Libreville.³⁶ During the remaining of the operation, they stayed under French OPCON as part of the French operation Epervier in N'Djamena. Considered as "on-call" forces in N'Djamena during the operation, they would have had to deploy to Libreville, and France would place them under EUFOR Operation Commander's OPCON. However, this process was not automatic, and French and EU authorities would have needed some time to complete that process.

Helicopter Operations

Helicopter operations during operation EUFOR RD Congo remained consistent with the model, in particular according to their role as troop transport and CAS assets. As the French model predicts, the operation involved a small number of helicopters. Three German CH-53s operated from N'Dolo airport. Their primary mission was troop transport, and the force planned to use them for civilian extraction if necessary.

Helicopters also performed CAS and reconnaissance missions in support of the Special Operations Forces.³⁷ As already mentioned, France stationed two Gazelle

³⁴ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 318.

³⁵ A fire broke out in one of Jean-Pierre Bemba's residence immediately after the flight of the two Mirage F1CRs. Rumors that French aircraft had bombed Vice-President Bemba's office spread around the city. As a result, the EUFOR had to make a public relation campaign to deny this false information. Gérard Gaudin, "Ailes Européennes au Congo," *Air & Cosmos* 25 August 2006, 37.

³⁶ 25-30 July and 7-15 August 2006

³⁷ Colonel Patrick Brethous, "L'Emploi des Hélicoptères dans les Opérations Spéciales," *Penser Les Ailes Françaises* October 2007, 90.

helicopters and two Puma helicopters over the horizon in Gabon. Along with fifty SOF troops, the two Gazelle and the one Puma also deployed to N'Djili airport in Kinshasa on the 21 August to participate in the securing of the city.³⁸

The only deviation regarding the use of helicopters in their SAR and CSAR missions was due to an operational factor. First, the European forces did not need any CSAR assets because the operation took place in a permissive environment. Furthermore, as agreed at the on-set of the operation, the MONUC was responsible for the support of the EU forces. In particular, the MONUC already managed the SAR mission over the country. This is why EUFOR had neither specific assets nor specific procedures for SAR.

*Remotely Piloted Aircraft Operations*³⁹

Finally, an anomaly to the French model was the use of Remotely Piloted Aircraft (RPAs).⁴⁰ A Belgian detachment operated four B-Hunter RPAs in N'Dolo airport in Kinshasa.⁴¹ Their mission was to provide surveillance to all the levels of the chain of command.⁴² It was also supposed to share imagery with the EUPOL Kinshasa, but technical limitations reduced the relevance of that exchange.⁴³ However, the final report of the Western European Union (WEU) on EUFOR RD Congo highlighted their high vulnerability as the detachment lost one aircraft because of a technical failure, and light weapons shot down a second one.⁴⁴

Both operational and political factors explain the deviation from the model of employment of air assets during EUFOR RD Congo. It reproduced the two-echelon

³⁸ Gaudin, "Ailes Européennes au Congo," 37.

³⁹ The label "Remotely Piloted Aircraft" as replaced the old appellation of "Unmanned Aerial Vehicles." This paper will use the former label to characterize both. This section and the analysis of RPA operations, while not part of the initial model developed for the French use of air power, proved necessary during the study of operation Artemis. Over time, and during the study of subsequent operations, RPA operations will take a growing importance, and it is therefore necessary to study them during that operation.

⁴⁰ Gaudin, "Ailes Européennes au Congo."

⁴¹ Fiorenza, "EUFOR Reaches Full Capability in the DRC," 19.

⁴² Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 22.

⁴³ Fiorenza, "EUFOR Reaches Full Capability in the DRC," 19.

⁴⁴ Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 22.

strategy as it relied on French prepositioned aircraft in N'Djamena and Libreville, and used French facilities in Gabon. The operation also showed the same weaknesses of its strategic airlift component as envisioned in the model.

As emphasized in the introduction of this chapter, EUFOR RDC had unique characteristics and some of its operational factors explain the deviation from the model like the absence of SAR and CSAR missions for the helicopters, a different use of fighter aircraft, and the presence of new assets such as RPAs.

However, political factors were also prominent as they restrained the airlift capabilities because of the limits of force generation and political limitations imposed by member states. Further exploring the influence of these political and operational factors, the next section delves into the planning and command and control issues, and digs into what Claudia Major characterizes as a very complex European chain of command.⁴⁵

PLANNING, COMMAND AND CONTROL

It is emblematic that, if a French General led the first European military mission in Africa in 2003, the EU Council appointed the German Lieutenant-General Karlheinz Viereck to command the second one in 2006.⁴⁶ Furthermore, as to emphasize the central role of air power, General Viereck was a reconnaissance pilot by trade.⁴⁷ He set up the OHQ in Potsdam (Germany). French army Major-General Christian Damay became the Force Commander and set-up its headquarters in Kinshasa at the airfield of N'Dolo.⁴⁸

Coherent with the model, operation EUFOR RD Congo made full use of deployable C2 structures. Going further, as to keep the smallest force footprint possible in Kinshasa, it deployed a FHQ rear and a JFACC rear in Libreville.⁴⁹

As in the French model, the command and control structure was centralized and under theoretical strong political ties and constraints; however, national political calculus

⁴⁵ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 316.

⁴⁶ French Delegation to the EU Political and Security Committee, "Guide to the European Security and Defence Policy," (November 2008), 44 and 78.

⁴⁷ EUFOR RD Congo Operation Headquarters, "Operation Commander's Biography," (2006).

⁴⁸ EUFOR RD Congo Force Headquarters, "Force Commander's Biography," (2006).

⁴⁹ The Force Commander decided to redeploy the J1, J4, and J8, and the JFACC redeployed the A1, A35, A4, and A6 in Libreville. They were located in a French Army barracks usually hosting prepositioned troops.

disrupted the system. Given the political dimension of the mission, the model built in Chapter 1 would have expected strict ties with the political level. The Political and Security Committee (PSC) was in charge of that political control.⁵⁰ However, national interests disrupted the global effectiveness of the force and induced tensions in the coalition. As the WEU report suggests, national interests may have influenced some of the decisions of the Operation Commander.⁵¹

Political factors also challenged the model as they induced a lack of continuity during the planning phase and disrupted the uniqueness of the command structure. First, the planning for operation EUFOR RD Congo suffered from the initial difficulties to find a framework country to lead the operation. Three months elapsed from the UN initial letter on 27 December 2005 to the pre-identification of Germany as providing the OHQ on 4 April 2006.⁵² Only in March 2006 did the EU decide to launch the military-strategic planning process.⁵³ The final report of the WEU qualified the three months between the Union's decision in principle and the choice of the military chain of command as a "considerable gap."⁵⁴ It also concluded that, "the transportation of political directives to the military level was hampered by a lack of continuity in the military planning chain, due to the late designation of the OHQ."⁵⁵

Second, not only did indecision in choosing the headquarters delay the planning process, it also disrupted it. As Bjorn Olav Knutsen contends, difficulties also arose during the planning phase because the late build-up of the FHQ.⁵⁶ As Knutsen explains, the parallel planning between the OHQ and the FHQ could not happen and resulted in a lack of coherence in the plan.

⁵⁰ The European Council assigned the political control and strategic direction of the operation to the PSC. In particular, it could take decisions, amend the planning documents, and appoint the Operation or Force Commanders. For further details, see Assembly of the Western European Union, "European Union Operations in the Democratic Republic of the Congo (DRC) – Reply to the Annual Report of the Council," 20.

⁵¹ As the WEU report suggests, the Force Commander did not answer the call for reinforcement by the FHQ as it would have meant deploying German troops from Libreville to Kinshasa. For further details, see Assembly of the Western European Union, "European Union Operational Chains of Command," (6 May 2008), 7.

⁵² "EUFOR RD Congo: The Making of a New Mission," *Impetus* 24 April 2006, 17.

⁵³ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 313.

⁵⁴ Assembly of the Western European Union, "European Union Operational Chains of Command," 6.

⁵⁵ Assembly of the Western European Union, "European Union Operational Chains of Command," 7.

⁵⁶ Knutsen, "The EU and the Challenges of Civil-Military Coordination at the Strategic Level," 47.

Third, strategic watch was deficient because of the inadequate and scarce EU military structures. As the WEU report concluded, the “lack of a permanent body of experts in the pre-decision strategic planning process” disrupted the overall efficiency of the political and military processes, in particular by stressing the European Union Military Staff (EUMS) over its limits.⁵⁷

Finally, national interests challenged the uniqueness of the command structure, and induced divergences between the Operation Commander and the Force Commander. After noticing differences between the situation assessments of the OHQ and the FHQ, and because of their possible attribution to national influences, the Political and Security Committee (PSC) further requested that the Force Commander directly report to it at Brussels.⁵⁸

Political factors explain the deviations from the model regarding the planning as well as the command and control organization and operations. First, EU Military structure proved inadequate to convert quickly the political decisions in a coherent military plan. Second, it seems that national interests came into play and influenced military commanders. Consistency with the French model would have placed political actors acting directly on their national commanders inside the structure, the deviation from the model resulted from the PSC playing the political actor and the EUFOR commanders answering to its orders only. Nevertheless, with an accurate vision of the situation, Jean de Ponton d'Amnecourt contends that, during operation EUFOR RD Congo, “the distance between the strategic, operational, and tactical headquarters have induced hazard and risks in the mission.”⁵⁹ In order to complete our analysis of the model, the next section climbs one-step further on the levels of the operation and studies the use of air power as a political tool.

AIR POWER AS A POLITICAL TOOL

⁵⁷ Assembly of the Western European Union, "European Union Operational Chains of Command," 7.

⁵⁸ Assembly of the Western European Union, "European Union Operational Chains of Command," 7.

⁵⁹ Jean de Ponton d'Amnecourt, "The EU 'S Africa Strategy: Where Do We Come from and Where Do We Go?," in *The EU's Africa Strategy: What are the Lessons of the Congo Mission?* (Brussels: Security & Defense Agenda, 7 March 2007), 37.

Consistent with the model, the European force received a clear mandate from the United Nations. From the onset of the operation, Germany requested a robust mandate as a condition for leading it.⁶⁰ However, as the operation proceeded, the mandate proved too tight, and lacked flexibility when the second round of the elections slipped in time. Some countries expressed concern regarding this lack of flexibility, as it proved too restrictive and threatened to compromise the mission. However, Germany, because of internal political constraints, refused to agree on any modification to the mandate.⁶¹

If the small size of the force is consistent with the model, the mechanisms that authorized it stemmed from different reasons than the one used to build the model. With only 1100 troops in DRC and 1300 in Gabon, the footprint of the European force was small, one could say too small. It also relied, as in the model, on air power. The comparison stops there. Two reasons explain the further divergence from the model. First, troops in Kinshasa relied not on the extra firepower from the fighter aircraft, but on the over the horizon troops in Gabon and therefore on the ability of airlift assets to deploy them in a timely manner. Second, due to the shape of the operation, the EU forces were only in support to the MONUC. They served as the extra firepower to deal with unexpected situations, not as the bulk of the force.

The absence of fighter aircraft during the entire operation expressed a decreasing reliance on air power as a diplomatic tool. During EUFOR RD Congo, the deployment of attack aircraft remained limited to two periods of one week. The roots of the deviation are difficult to analyze. Whether the German-led OHQ did not have the same culture as the French regarding the use of fighter aircraft as diplomatic tools, or the influence of the situation was different. However, the model would have predicted the presence of fighters during the entire operation. Nevertheless, the presence of fighter aircraft only two weeks in a four-month operation is in itself enough to conclude that this activity was

⁶⁰ In his study, Denis Tull describes the five conditions Germany set up to take the lead of the operation: (1) the consent of the government of DR Congo; (2) a robust mandate from the UN Security Council; (3) substantial military participation by other EU member states apart France and Germany; (4) geographic concentration on the Congolese capital; and (5) duration of the operation restricted to four months. For further details, see Tull, "EUFOR RD Congo: A Success, but Not a Model," 49.

⁶¹ Bjorn Olav Knutsen explains how the German Defense Minister had already promised that German troops would be home for Christmas. For further details, see Knutsen, "The EU and the Challenges of Civil-Military Coordination at the Strategic Level," 48.

a deviation from the model. Air power did not play the same political role during operation EUFOR RD Congo as predicted by the French model. Specifically, it did not play a diplomatic role with such a short presence of its attack assets.

EUFOR RD CONGO: MAINLY A POLITICAL DEVIATION

Operational factors explain some deviations from the French model during operation EUFOR RD Congo; however, the study demonstrates that the deviation is mainly due to political factors. The operation showed some coherence with the French model of use of air power. Strategic airlift weaknesses, the use of small cells of fighter aircraft, and a small force footprint are examples of the adequacy to the model. Furthermore, operational factors explained some deviations from the model. The role of the EUFOR as a support to the MONUC explained why it did not perform the SAR mission, or could reduce the force footprint without relying on the extra firepower provided by fighter aircraft, but on airlift capabilities. However, political factors were the strongest elements explaining the inadequacy to the model. Member states designed a very narrow mandate, particularly the geographic area and length of the operation.⁶² Most significantly, national interests induced slowness in the planning and decision-making processes, and disrupted the proper command and control structure of the operation.

These factors did not hamper operation EUFOR RD Congo to be successful, as the European forces helped secure the country at a critical time in its history. However, it certainly reduced its effectiveness and some theorists noticed that while it was a success, it should not become a model for future European operations.⁶³ The next time the European Union would get involved in a military operation on the African continent, the conditions would prove completely different, leading to the question of how much it learned and could use from operation EUFOR RD Congo.

⁶² European Security and Defense Committee Assembly of the Western European Union, "La Défense Européenne et le Traité de Lisbonne – Réponse au Rapport Annuel du Conseil," (18 May 2010), 11.

⁶³ Tull, "EUFOR RD Congo: A Success, but Not a Model."

Chapter 4

EUFOR TCHAD/RCA 15 March 2008-15 March 2009

In memory of Sergeant Gilles Polin (French Army, 1st Regiment Parachutiste d'Infanterie de Marine), killed in action on 3 March 2008.

EUFOR has been a very visible presence in the region and has contributed positively by increasing the sense of security for the populations... The positive impact, the new dynamics, will therefore extend beyond this one-year ESDP operation... EUFOR has been an important milestone in the security policy of the EU.

- Torben Brylle, EU Special Representative for Sudan

On its launching day, EUFOR Tchad/RCA became the fifth military operation under the aegis of the European Security and Defense Policy (ESDP).¹ It was the third on the African continent after operations Artemis and EUFOR RD Congo. Considered as a military “bridging operation” for the UN operation in Chad and the Central African Republic (CAR), it was to operate in one of the most remote areas of Africa in support of the humanitarian relief effort to Darfur, a region plagued by its refugee camps and internally displaced personnel (IDP) sites

With 3,700 troops and a mission lasting one year, operation EUFOR Tchad/RCA has been the largest and the longest EU military operation in Africa. It showed the ability of the European forces to support an extended mission. Involving twenty-six European countries, including non-EU member states (Albania, Croatia, and Russia); it has also been the most multinational operation in Africa to date.² Beyond the collaboration with the UN operation, what also makes operation EUFOR Tchad/RCA unique is its coexistence with the French operation Epervier within the same theater of operation.

¹ Operations Concordia (2003) and Athena (2004) were the two other EU military operations that did not take place in Africa.

² All EU member states except Denmark, Estonia, Latvia, and Malta participated in the operation. Cynthia Glock, "Déploiement de L' EUFOR au Tchad: un Espoir pour le Darfour et ses Réfugiés?," *Humanitaire*, no. 19 (Summer 2008), <http://humanitaire.revues.org/index451.html> (accessed 24 January 2011).

Most characteristics of operation EUFOR Tchad/RCA suggest that it should match the French model. Like operation Artemis, it was a bridging operation for the UN. Moreover, France was a framework nation, provided the OHQ at Mont Valérien (France) as well as the majority of the troops. Finally, EUFOR Tchad/RCA took place in a country where France had operated since 1986. This chapter follows the outline of the first case study moving from a brief review of mission background, to political and military factors, and then to assessment.³

BACKGROUND OF OPERATION EUFOR TCHAD/RCA

Since 2003, the activities of armed groups have turned Darfur, the western region of Sudan, into a humanitarian disaster. The conflict in this very poor region of Africa has spilled over to neighboring countries, including Chad and the Central African Republic. It has also produced a vast amount of refugees and internally displaced personnel (IDPs).⁴

In 2004, the African Union launched an operation in Sudan to provide humanitarian help to the civilian population, the African Union Mission in Sudan (AMIS). A combined UN-AU mission replaced it on 31 July 2007, the UN-AU hybrid mission to Darfur (UNAMID).⁵ This mission only focused on Sudan.

In order to deal with the humanitarian crisis in Chad and the CAR, the UN Security Council launched a new initiative on 25 September 2007.⁶ It envisioned a “multidimensional presence” with three components.⁷ First, the Mission des Nations Unies en République Centrafricaine et au Tchad (MINURCAT) would provide the bulk of humanitarian relief, as well as training for the local forces.⁸ It would specifically

³ For a complete background of operation Tchad/RCA, see Seibert, "African Adventure? Assessing the European Union's Military Intervention in Chad and the Central African Republic."

⁴ In January 2008, estimations evaluated them at 240000 Sudanese refugees in Chad and 3000 in CAR, as well as 179000 Chadian, and 20000 Central African IDPs. Laurent Zecchini, "L'Union Européenne Lance l'Opération EUFOR au Tchad et en Centrafrique," *Le Monde* 30 January 2008, 4.

⁵ United Nations Security Council, "Reports of the Secretary-General on the Sudan," (31 July 2007).

⁶ United Nations Security Council, "Security Council Resolution 1778 (2007) the Situation in Chad, the Central African Republic and the Sub Region " (25 September 2007).

⁷ United Nations Security Council, "Report of the Secretary-General on Chad and the Central African Republic," (10 August 2007), 5.

⁸ The initial mandate included a maximum of 300 police and 50 military liaison officers.

sustain the efforts of the second element; a Chadian police force aimed at securing IDPs and refugee camps, and called *Détachement Intégré de Sécurité* (DIS).⁹

For the third and final component, a European force, EUFOR Tchad/RCA, would support the multidimensional UN presence in both Eastern Chad and North-Eastern Central African Republic. The UN centered EUFOR's mission on the concept of restoring security and protecting IDPs and refugees as well as humanitarian efforts by the UN, the IOs, and the NGOs.¹⁰ That would become a bridging operation for a UN military force and would set up the conditions for its safe deployment.

The EU launched EUFOR Tchad/RCA on 28 January 2008.¹¹ Lieutenant General Patrick Nash, the Operation Commander, declared the initial operational capability (IOC) on 15 March 2008. It marked the beginning of a 12-month operation as planned by the UNSC resolution. The force reached its full operational capability (FOC) in September 2008.

As emphasized by the Operation Commander, the objective of the EUFOR was to provide a SASE (Safe and Secure Environment) through mobile patrolling, supported with a Quick Reaction Force (QRF).¹² To meet the complex demands of his mission, he set up his mission objective as "the establishment of a visible, credible, impartial, and flexible force."¹³

The build-up of the follow-on UN force proved difficult. However, both the EU and the UN wanted to "avoid a security vacuum" at the end of the mission.¹⁴ Therefore,

⁹ Initially called the *Police Tchadienne Pour la Protection Humanitaire* (PTHP), Chadian authorities later relabelled it the *Détachement Intégré de Sécurité* (DIS). For further details, see Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 9.

¹⁰ As authorized by the UNSC in its resolution, EUFOR had to (1) contribute to protecting civilians, (2) facilitate delivery of humanitarian aid, (3) contribute to the protection of UN personnel, facilities, installations, and equipment, and ensure their freedom of movement. For further details, see United Nations Security Council, "Security Council Resolution 1778 (2007) the Situation in Chad, the Central African Republic and the Sub Region ", 4.

¹¹ Council of the European Union, "Operation EUFOR Tchad/RCA," (28 January 2008).

¹² The QRF was composed of mobile SOF troops able to react on order anywhere in the area of operations. Lt General Patrick Nash, "Summary of Remarks by Lt General Patrick Nash, Operation Commander EUFOR Tchad/RCA," (Brussels: 29 January 2008).

¹³ Nash, "Summary of Remarks by Lt General Patrick Nash, Operation Commander EUFOR Tchad/RCA," 3.

¹⁴ Council of the European Union, "Council Conclusions on Operation EUFOR Tchad/RCA," (16 March 2009), 1.

on 15 March 2009, the transfer of authority to the UN mission proceeded through a “re-hatting of the EU contingent” under UN command.¹⁵ The main challenge of the MINURCAT would be to capitalize on EU’s one-year mandate and the improvement of the security in the region.¹⁶

As the background of the operation shows, EUFOR Tchad/RCA operated in a complex political and operational situation where tribal and ethnic rivalries as well as armed group and bandit attacks competed in intensity with the depth of the humanitarian distress. The next section extracts the factors relevant for our study.

POLITICAL AND OPERATIONAL CONTEXT

From the onset of the operation and its planning phase to its end in March 2009, three political factors would prove critical to operation EUFOR Tchad/RCA. First, the force had to operate in the context of the proxy war between Chad and Sudan. Chadian President Idriss Deby, and Sudanese President Omar Hassan Al-Bashir were sustaining and hosting rebellions against each other’s countries. Furthermore, the weakness of the CAR, and the porosity of the border complicated the situation.

The cross border involvement of armed groups represented the main threat to the security in the region, and influenced EUFOR’s strategy and operation. In February 2008, a rebel attack from Sudan against the Chadian government disrupted and delayed the deployment of the European force.¹⁷

Second, the political situation challenged the intended neutrality of the EUFOR. Eager to participate in the humanitarian relief of distressed populations, most EU countries did not want to get involved in the French African strategy. In particular, they did not want others to see the EUFOR as a support to the Chadian regime. Therefore, in the mission statement to its military force, the European mandate specified, “the

¹⁵ On 15 March 2009, 1700 EU troops went under the UN banner. For further details, see *European Security and Defence Policy: The First Ten Years (1999-2009)*, 348.

¹⁶ Major General Boguslav Pacek, "Security in Chad / Car Hangs in the Balance," *Jane's Defense Weekly* 18 March 2009, 25.

¹⁷ On 31 January 2008, rebel forces launched an attack against Chadian President Idriss Deby. The EUFOR stopped its deployment, which resumed on 14 February. For further details, see Brooks Tigner, "EUFOR Mission Resumes Its Deployment to Chad and Car," *Jane's Defense Weekly* 20 February 2008, 20.

operation [would have to] be conducted with full independence, impartiality, and neutrality.”¹⁸

The importance of Epervier’s support to EUFOR further complicated that task; however, the EUFOR managed to deal with this complication. The European forces needed the military support from the French operation for logistics and firepower, including the support of fighter aircraft. This reliance on French forces remained a sensitive issue during the entire operation.¹⁹ However, the EUFOR did its best to avoid any compromise of principle. For example, during the February 2008 rebel attack against Chad, French operation Epervier supported the Chadian government with logistical and intelligence support, while French troops in the EUFOR remained neutral and did not intervene.²⁰

The third political factor influencing the operation was the central importance of securing IDP and Refugee camps. In *Rebel without Borders*, Idean Salehyan explains how the presence of refugee camps is a source of instability in a trans-border conflict.²¹ Securing these camps was therefore of primary importance for EUFOR. The Chadian police and particularly its newly created DIS had this charge. Therefore, it played a central role in the overall EU-UN strategy. If the MINURCAT was in charge of the training of the force, the EUFOR had to secure the region to allow them operate specifically in the camps.

Along with the three political factors, two operational factors were critical for the EUFOR. Geography was the first and primary factor shaping EUFOR’s strategy as European forces had to deploy and operate in a semi desert landlocked country. EUFOR Tchad /RCA operated in a vast and austere area of operation with an overextension of its supply lines. As Colonel Duval remembers, few local resources were available, and the

¹⁸ Council of the European Union, "Council Conclusions on Chad, the Central African Republic and Sudan," (16 October 2007), 2.

¹⁹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 349.

²⁰ Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 10.

²¹ Studying Trans National Rebel (TNR) groups, Idean Salehyan contends that states facing TNRs are more likely to face civil wars, that wars with TNRs last longer, and that refugees are more likely to contribute to rebellions if they are located in weak states. For further details, see Idean Salehyan, *Rebels without Borders: Transnational Insurgencies in World Politics* (Ithaca, NY: Cornell University Press, 2009), 63.

force had to import almost everything it needed.²² With more than 800 km from North to South and more than 400 km from East to West, EUFOR had to secure a vast area.²³ Furthermore, the region had poor logistical infrastructure. Chad, a country twice the size of France had only 500 km of paved roads and two main airports, N'Djamena and Abéché, with very limited capabilities. Bjørn Seibert reminds us that this region is also “one of the points in Africa’s furthest from the sea.”²⁴ The Operation Commander assessed the challenge his forces faced, being “located 2,000 km from the nearest seaport and 4,450 km from Brussels.”²⁵ The shipping of supplies by sea and ground transportation through Cameroon for example took thirty days from Europe to reach Abéché.²⁶

Although a hot and arid region during most of the year, Chad experiences a rainy season from June to early September, and it complicated EUFOR’s operations. This weather constraint is why the Operation Commander initially planned to achieve FOC by mid May.²⁷ EUFOR also used that period to show the resolve of the force by intensifying its operations. As the Force Commander reminds, “during the rainy season we made even more patrols than before, precisely to show to the people that the natural obstacles did not stop us.”²⁸ As emphasized by Colonel Duval, it gave a critical importance to tactical airlift by fixed or rotary wings aircraft to sustain the force.²⁹ The second operational factor resulted from the presence of three operations (the EUFOR, the

²² Colonel Serge Duval, "L'Organisation du Soutien d' une Opération Européenne: EUFOR Tchad RCA," *Penser les Ailes Françaises* February 2009, 68.

²³ Zecchini, "L' Union Européenne Lance l' Opération EUFOR au Tchad et en Centrafrique," 4.

²⁴ Bjørn H. Seibert, "EUFOR Chad/CAR: A Logistical Litmus Test," *RUSI* (January 2008).

²⁵ Nash, "Summary of Remarks by Lt General Patrick Nash, Operation Commander EUFOR Tchad/RCA," 8.

²⁶ On the model used by French operation Epervier, the EUFOR signed an agreement with Cameroon for land logistics. It took 17 days for a ship coming from Europe to reach Douala (Cameroon), the Sea Port of Debarkation (SPOD). It then took 12 days to reach N'Djamena by land transportation. Two options existed after that point. Either 4 more days by land or 2 hours flying to Abéché. For further details, see Céline Limousin, "L' EUFOR: un Défi Logistique de Taille," *Air Actualités* June 2008, 42-43.

²⁷ Unfortunately, EUFOR experienced several delays in the building of the force (rebel attack against Chadian government, lack of airlift assets...), and the Operation Commander declared the full operational capability in September 2008, after the rainy season ended. Nash, "Summary of Remarks by Lt General Patrick Nash, Operation Commander EUFOR Tchad/RCA," 6.

²⁸ Hans de Vreij, "Interview: Brigadier General Jean-Philippe Ganascia," *Jane's Defense Weekly* 14 January 2009.

²⁹ Duval, "L'Organisation du Soutien d' une Opération Européenne: EUFOR Tchad RCA," 68.

MINURCAT, and Epervier) in the same theater, without taking into account the NGOs.³⁰ Beyond the need for coordination, the three operations had to compete for scarce resources, including apron space at the two main airfields, as well as for fixed and rotary wings airlift assets.

The EUFOR designed a specific approach to accomplish its mission. In order to provide the SASE, the Operation Commander relied on credibility and presence, and used two components.³¹ First, the EUFOR fielded three battalions, each one responsible for a geographic area (See Appendix E). In the North, Polish forces operated from Iriba. The central one, essentially manned by French troops, set up its headquarters in Forchana. Finally, the Irish battalion took responsibility of the southern area with its headquarters in Goz Beida.³² The EUFOR also set up a multinational detachment in Birao (CAR).

The second aspect of the plan was dynamic. It relied on patrols by EUFOR troops in the entire region and on the presence of mobile Special Operations Forces.³³ Because of its approach, the EUFOR had a real deterrent effect. For example, during a 2009 rebel incursion from Sudan, the armed groups avoided the area of refugee camps because the EUFOR defended them.³⁴ With the background as well as the political and operational factors that shaped the character of the operation in mind, it is time to turn to the mission itself, and more specifically to the employment of air assets. The next section uses the model to compare the adequacy of the use of air assets and extracts the factors influencing the deviations.

EMPLOYMENT OF AIR ASSETS

³⁰ The French operation Epervier had operated in Chad since 1986 according to a defense agreement linking the two countries.

³¹ Nash, "Summary of Remarks by Lt General Patrick Nash, Operation Commander EUFOR Tchad/RCA," 3.

³² Bjørn H. Seibert, "Operation EUFOR Tchad/RCA and the European Union's Common Security and Defense Policy," *Strategic Studies Institute Monograph* (October 2010): 24.

³³ During its mandate, EUFOR carried out 2000 short-range patrols and more than 400 long-range ones. Furthermore, it carried out several large operations. For further details, see EU Council Secretariat, "EU Military Operation in Eastern Chad and North Eastern Central African Republic (EUFOR Tchad/RCA)," (March 2009).

³⁴ Gerrard Cowan, "Chad / Car Operations 'Prove EU Capabilities'," *Jane's Defense Weekly* 15 April 2009, 14.

Operational factors called for a central role for air power in the strategy planners' design for operation EUFOR Tchad/RCA. Therefore, in order to expand the under-developed Chadian airport infrastructure, and help in the logistics maneuver, EUFOR had to build new aircraft aprons with cargo facilities in N'Djamena and Abéché.³⁵ As we compare the employment of air assets during this operation with our model, the role of operation Epervier, the influence of geography, and the importance of sustaining a one-year mandate will be some of the underlying issues in this section. In that perspective, airlift operations are the first under scrutiny.

Airlift Operations

All actors emphasized the logistical constraints and the importance of airlift operations in sustaining a 3,700-troop contingent in an austere and difficult environment.³⁶ It is also necessary to remember that operation EUFOR Tchad/RCA also had to compete, at that time, with operations in Afghanistan for both strategic and tactical airlift capabilities.³⁷

Strategic airlift operations remained coherent with the model as it demonstrated the European weaknesses in that field. To compensate for its lack of military strategic airlift assets, EUFOR used An-124 under the SALIS agreement.³⁸ The coalition countries also individually leased An-124 and Il-76. During the six first months, the EUFOR chartered 140 flights from Europe.³⁹ Finally, EUFOR used 176 sorties of Il-76 and An-124 for the entire operation.⁴⁰ N'Djamena airport played a role as fundamental as Entebbe during operation Artemis as it received the majority of strategic airlift from Europe as well as land transportation from Cameroon.

³⁵ Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," (27 March 2009), 6.

³⁶ For a detailed study of logistical constraints and environment, see Seibert, "African Adventure? Assessing the European Union's Military Intervention in Chad and the Central African Republic."

³⁷ Seibert, "EUFOR Chad/CAR: A Logistical Litmus Test."

³⁸ Seibert, "African Adventure? Assessing the European Union's Military Intervention in Chad and the Central African Republic," 20.

³⁹ Limousin, "L' EUFOR: un Défi Logistique de Taille," 39.

⁴⁰ Seibert, "Operation EUFOR Tchad/RCA and the European Union's Common Security and Defense Policy," 20.

Tactical airlift operations also remained mainly coherent with the model; however, they experienced a small deviation as they relied on the contribution of the French operation Epervier. The planning of the operation pointed out that sustaining the force in Eastern Chad and northeastern CAR would involve a great contribution of tactical airlift. However, the force generation conferences proved difficult and the European countries did not provide enough assets to answer their stated requirements. Therefore, France had to offer the support of its assets deployed for operation Epervier. They delivered twelve tons from N'Djamena to eastern Chad every day during the entire operation.⁴¹

Several C130s from Greece, the Netherlands, and Portugal operated liaisons with Europe or intra-theater between N'Djamena and Abéché. However, EUFOR remained coherent with the model, as it emphasized the importance of tactical aircraft and the use of makeshift runways. Spanish CN235 joined the French C160s in resupplying the three battalions in Forchana, Iriba, and Goz Beida.⁴²

Attack and Reconnaissance Aircraft and their Support

Although the EUFOR did not own attack aircraft, their use remained coherent with the French model, as operation Epervier supplied this mission. The Mirage F1s deployed in Chad for operation Epervier remained under French OPCON. This could look like a major deviation for the EUFOR, which did not own any assets. However, it is not. Operation Epervier provided, by extension, the three main missions of the model. First, the presence of fighter aircraft assured air superiority; however, their use remained minimal, as no real threat existed at that time. Second, these assets provided intelligence and reconnaissance to the EUFOR. The Mirage F1CRs and their C135FR tanker flew daily reconnaissance missions for operation EUFOR Tchad/RCA.⁴³

⁴¹ Limousin, "L' EUFOR: un Défi Logistique de Taille," 38.

⁴² Miguel Angel Falla Pineiro, "Operacion EUFOR Chad/RCA," *Revista de Aeronautica y Astronautica* June 2009, 544-545.

⁴³ According to the French Minister of Defense, the Mirage F1s performed 360 missions for EUFOR, for a total of 1500-flight hours. For further details, see French Minister of Defense, "EUFOR Tchad/RCA Relevé Par la Minurcat - Bilan de l' Opération," <http://www.defense.gouv.fr/operations/autres-operations/operations-achevees/2008-eufor-tchad-rca/actualites/16-03-09-eufor-tchad-rca-releve-par-la-minurcat#1>.

Finally, Epervier's fighter aircraft also provided a reserve of firepower. Military planners considered CAS during operation EUFOR Tchad/RCA as the "last resort option."⁴⁴ However, during the entire operation, the French Mirage F1CTs sustained a two-hour CAS alert, ready to support the European forces.⁴⁵ Contrary to EUFOR RD Congo where the available fighters were "offset" in Chad, the deterrent effect of the fighters was an extension of the presence of operation Epervier, which makes for consistency with the French model.

Helicopter Operations

Helicopter operations represented a deviation from the model, particularly with their number and the central role they played during operation EUFOR Tchad/RCA. Helicopters took on an importance unseen before in any EU operation in Africa, in particular at the tactical level. Early during the planning phase of the operation, EUFOR planners identified helicopters as the critical resource according to the geographic area, the amount of troops deployed and the strategy they envisioned.⁴⁶

EUFOR Tchad/RCA emphasized the importance of helicopters in their tactical airlift and CAS missions. Supplementing the fixed wing tactical airlift component, they helped resupply the three camps in Forchana, Iriba, and Goz Beida.⁴⁷ Helicopters also allowed for reacting "swiftly to situations and [projecting] forces to remote areas in a short timeframe."⁴⁸ For example, they allowed the extraction of NGO members from Ouandja (CAR) during a rebel attack in November 2008.⁴⁹ Overall, they were a major component of the strategy of the QRF, which included a Special Forces Air Task

⁴⁴ The QRF was the first support patrols and camps could expect in case of emergency. Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 23.

⁴⁵ France, while retaining OPCON on its fighter aircraft, guaranteed that its Mirage F1s would intervene for any emergency CAS to the profit of European forces within two hours during the entire operation. Céline Limousin, "Chef d'Orchestre de la Composante Aérienne de L'EUFOR," *Air Actualités* September 2008, 40-41.

⁴⁶ Donald McFarlane, "Into Africa: EU Force Needs Lift," *Jane's Defense Weekly* 28 November 2008, 16.

⁴⁷ Limousin, "L'EUFOR: un Défi Logistique de Taille," 39.

⁴⁸ Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," 5.

⁴⁹ Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," 5.

Group.⁵⁰ The four French attack helicopter Gazelles, fitted with HOT missiles and based in Abéché, provided the firepower.⁵¹

The EUFOR did not have a specific SAR component, as the model would recommend. However, this does not constitute a deviation from the model as Puma helicopters deployed for operation Epervier in N'Djamena and Abéché provided latent capability for the SAR mission.

Finally, helicopter operations constituted a major deviation from the model because of the great number of assets involved. Even if the operation constantly lacked rotary wing aircraft, it managed to field the largest fleet to date in an EU operation in Africa. EUFOR's mission required to secure an area that Bjørn Seibert described as vast as Germany, with only 3,700 troops, requiring a substantial number of helicopters.⁵² In order to meet the force requirements, and given the lack of assets provided by states during the first force generation conferences, France increased its initial intended participation.⁵³ Even with this extra participation, the lack of helicopters forced the EU to ask for external help, in particular from Russia.⁵⁴ This latter answered favorably and, in December 2008, it deployed four MI 8s, which greatly increased the mobility of the European force.⁵⁵ Although politically delicate because few months after Russia invaded

⁵⁰ Seibert, "Operation EUFOR Tchad/RCA and the European Union's Common Security and Defense Policy," 21.

⁵¹ French Minister of Defense, "L'Opération EUFOR Tchad/RCA," <http://www.defense.gouv.fr/operations/autres-operations/operations-achevees/2008-eufor-tchad-rca/dossier/l-operation-eufor-tchad-rca>.

⁵² Bjørn H. Seibert, "EUFOR Tchad/RCA – a Cautionary Note," *European Security Review* (3 March 2008): 3.

⁵³ France initially intended to provide 40% of the total troops and 6 helicopters. As the force generation processes did not provide the sufficient number and threatened to compromise the mission, France increased its participation to 2100 troops, representing 55% of the EUFOR and 8 out of the 13 initial helicopters. For further details, see Philippe Bernard and Philippe Ricard, "La Force Européenne en Centrafrique et au Tchad Sera à Dominante Française," *Le Monde* 12 January 2008, 6.

⁵⁴ As Ehrhart emphasizes, negotiations with Russia began in March 2008, and successfully ended in November 2008. For further details, see Hans-Georg Ehrhart, "Assessing EUFOR Chad/CAR," *European Security Review*, no. 42 (December 2008), http://www.isis-europe.org/pdf/2008_artrel_231_esr42-euforchad.pdf (accessed 17 November 2010).

⁵⁵ Council of the European Union, "Javier Solana, EU High Representative for the CFSP, Congratulates Lieutenant General Patrick Nash, Operation Commander of EUFOR Tchad/RCA on the Successful Completion of the Mission," (18 March 2009).

Georgia, it was the first time Russia took part in an EU operation.⁵⁶ Finally, while the EU only deployed respectively six and seven helicopters during its two previous military operations in Africa, EUFOR Tchad/RCA operated thirteen transport helicopters along with the four attack ones.⁵⁷ These seventeen helicopters represented the largest effort in that area, and constituted deviation from the French model.

Remotely Piloted Aircraft Operations

As during Operation EUFOR RD Congo, the use of RPAs represented a deviation from the model. The French Army operated the tactical RPAs, CL 289, and stationed them in Forchana. Although a modest contribution, these assets participated in the intelligence collection process, as well as the monitoring and surveillance of areas. France deployed them for the EUFOR mission; however, they operated in support of UN missions as well.⁵⁸

The analysis of the use of air assets demonstrates that airlift and attack aircraft operations remained consistent with the model; however, the use of RPAs, as the one already studied during EUFOR RD Congo, was a deviation from the model. Furthermore, helicopter operations during EUFOR Tchad/RCA were the major deviation from the model. Their great number stemmed from operational factors: geography, and their importance in the operation's strategy.⁵⁹ It also revealed the weakness of EU countries in providing those assets, and the necessity to call for other countries' participation such as Russia.

PLANNING, COMMAND AND CONTROL

⁵⁶ European Security and Defense Committee Assembly of the Western European Union, "The European Union Mission in Chad: EUFOR Tchad/RCA," (4 June 2008), 11.

⁵⁷ The transport helicopters were three Polish MI 17s, four Russian MI 8s, four French Puma, and two Irish helicopters. The French also deployed four Gazelle attack helicopters. French Minister of Defense, "L'Opération EUFOR Tchad/RCA."

⁵⁸ In its 6-monthly report to the UN, the Council of the European Union mentions the support of a UNHCR mission on the Chad-CAR border by the French RPAs. Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," 4.

⁵⁹ Although it is beyond the scope of this paper, this deviation from the model appears to tie this experience to the use of helicopters by French forces before the 1960s, specifically during the crisis in Algeria.

Highly involved in the political decision to launch the operation, France became the framework nation for EUFOR Tchad/RCA. However, in order to avoid any confusion with operation Epervier, it decided not to provide the operational commander for the European operation. The European Union appointed the Irish Lieutenant General Patrick Nash as Operation Commander in October 2007.⁶⁰ He used the French facilities at Mont Valérien as its operational headquarters.⁶¹ The EU also appointed French Brigadier General Jean-Philippe Ganascia as the Force Commander.⁶²

The force heavily relied on deployable command and control structures. The EUFOR first deployed its FHQ at “Stars Camp” in Abéché, with a rear FHQ in N’Djamena specifically in charge for the logistics. The JFACC, initially set up at “Europa Camp” in N’Djamena, moved to Abéché. Though the coordination of air assets with operation Epervier, whose headquarters were all in N’Djamena, became “slightly more difficult” as assessed by the JFACC, the operation followed normally its missions.⁶³

Operation EUFOR Tchad/RCA also demonstrated the difficulties of the EU in the transition between the strategic watch and pre-planning phase on the one hand and the planning phase on the other. First, it showed the inability of the European Union Military Staff (EUMS) to provide the pre-planning. This phase started in May 2007, but the EUMS realized in August how few officers were available for this pre-planning phase.⁶⁴ As France was involved in the decision, the CPCO took the relay, and when Lieutenant General Nash arrived in Paris, the French CPCO had already begun the pre-planning phase. Even if the CPCO played a central role, particularly for the strategic watch, the transition was not smooth, expressing a lack of continuity compared to the French

⁶⁰ Council of the European Union, "Javier Solana, EU High Representative for the CFSP, Met General Patrick Nash, Commander of Operation EUFOR Tchad/RCA," (16 October 2007).

⁶¹ The operation began with 140 military and civilian staff members at the OHQ during the summer of 2008. By the end of the operation, 220 personnel from 22 nations were working in Mont Valérien. Michael Geraghty, "Operational Effectiveness," *Signal* (Summer 2008), http://www.raco.ie/attachments/034_Operational_Effectiveness.pdf (accessed 10 November 2010), French Minister of Defense, "L'Opération EUFOR Tchad/RCA."

⁶² Council of the European Union, "Council Conclusions on Chad, the Central African Republic and Sudan."

⁶³ Colonel Laurent Camus, "Missions et Emploi des Moyens Aériens: le JFACC dans L'opération EUFOR Tchad RCA," *Penser les Ailes Françaises* February 2009, 71.

⁶⁴ Assembly of the Western European Union, "The European Union Mission in Chad: EUFOR Tchad/RCA," 12.

model.⁶⁵ This lack of continuity in the planning phase translated to months of delays for the launch of the operation. The WEU report on the operation noticed that it took five months to translate the political decision into the first military step, the first force generation conference.⁶⁶

The organization of the military structure during operation EUFOR Tchad/RCA successfully relied on deployable command and control structures. However, the deviation from the French model stemmed from the absence of continuity during the planning phase, and resulted in delays in the launch process.

AIR POWER AS A POLITICAL TOOL

Consistent with the French model, the EUFOR enjoyed a clear mandate. However, as it was the case during EUFOR RD Congo, the fact that most EU countries linked their participation in the force to an end date nurtured a debate on the real objectives of the operation.⁶⁷ In the same vein, facing the inadequacy of the MINURCAT to assume its mission on time, the EU found an innovative way to ensure the transition with the re-hatting of EU troops under the UN banner.

As during operation EUFOR RD Congo, the footprint of the EUFOR was small, with only 3,700 troops to monitor a huge area. Beyond a deliberate choice of strategy, it resulted from the difficulties during force generation conferences. Air power allowed the EU to deploy a small force, but, as for EUFOR RD Congo, the mechanism was different from the model. The use of the helicopter was the key to this light force. Strategy based on credibility and air power played a central role in it. The presence of an air force officer as the Chief of J5 of the OHQ certainly also added to the air mindedness of the

⁶⁵ Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 15.

⁶⁶ Assembly of the Western European Union, "The European Union Mission in Chad: EUFOR Tchad/RCA," 13.

⁶⁷ Critics noticed that the EU was pursuing an end-date strategy instead of an end-state strategy. For further details, see Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 30-31.

operation.⁶⁸ As Alexander Mattelaer contends, the force had to demonstrate its ability to intervene quickly in the entire region, and the speed of air power was the key.⁶⁹

Contrary to what the model would have predicted, the political control on air power did not remain tight. During the operation, there was a dilution of control on assets, and specifically on air assets. Some countries retained their air assets under their own control where the model would have predicted control by the PSC. The double hatting of Epervier assets and in particular its fighter aircraft is one example.⁷⁰ The Irish government also sent two helicopters on the condition that they remained linked to the Irish battalion. Therefore, based at Goz Beida during the operation, they operated exclusively for the benefit of the Irish battalion.⁷¹ Finally, Greece and Portugal fielded their C130s one week a month, mainly in phase with the rotations of their personnel.

Even if one could criticize the end-date strategy, the EUFOR Tchad/RCA had a clear mandate. It also found an innovative way to perform a smooth transition to the UN follow on force. However, the operation showed two deviations from the model. First, it demonstrated the loss of the importance of fighter aircraft as a political tool. Though air power allowed reducing the size of the force, it was because of the employment of helicopters, not the use of firepower provided by fighter aircraft. Second, the operation also showed signs of dilution of the control on air assets at the European level as some nations retained direct OPCON on their assets.

EUFOR TCHAD/RCA: A POLITICAL AND OPERATIONAL DEVIATION

EUFOR Tchad/RCA remains the largest operation ever led by the European Union. It is also the “most multinational mission ever to have been deployed in Africa.”⁷² As a foundation for its success, the EU recognized the central role of Chad in

⁶⁸ French Air Force Colonel Peugnet was the first air force officer ever appointed as a J5 in a European Union military operation. Colonel Paul Peugnet, "L'Impact du Facteur Aérien dans la Planification d'une Opération Européenne," *Penser les Ailes Françaises* February 2009, 56.

⁶⁹ Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 19.

⁷⁰ Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 24.

⁷¹ Peugnet, "L' Impact du Facteur Aérien dans la Planification d' une Opération Européenne," 58.

⁷² Assembly of the Western European Union, "The European Union Mission in Chad: EUFOR Tchad/RCA," 7.

the stability of the region.⁷³ Although it deployed a relatively small force, it was successful in securing the environment and allowed humanitarian workers provide help to refugees and IDPs.⁷⁴ Well accepted by the local population, EUFOR Tchad/RCA succeeded in the challenge to be an impartial, neutral, and independent force, despite its coexistence with the French operation Epervier.⁷⁵ It came at the right moment to “foster the development of the ESDP as a crisis management tool.”⁷⁶

However, beyond all these tangible and symbolic successes, EUFOR Tchad/RCA presented political and operational deviations from the model. The political deviation resulted from inadequate EU military structures and political indecisions that delayed the planning and the force generation process. Furthermore, if the presence of fighter aircraft remained a means to reduce the size of the force, its absence under European OPCON showed its loss of importance as a political tool for the EU. Finally, where the model would have suggested strong political ties of air assets with the PSC, some nations retained their national control on these air assets. Operational deviations mainly stemmed from geography and strategy. They emphasized the importance of the use of helicopters and their critical importance to the success of the operation.

Finally, if we can today label EUFOR Tchad/RCA as a success, we must also remember that it is the military operation when the European Union suffered its first casualty.⁷⁷

⁷³ In February 2008, Javier Solana emphasized the importance of Chad and the relation between Chad and Sudan in the stability of the sub-Saharan region. For further details, see Council of the European Union, "Javier Solana, EU High Representative for the CFSP, Comments on the Situation in Chad and Operation EUFOR Tchad/RCA," (4 February 2008).

⁷⁴ Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," 3.

⁷⁵ Council of the European Union, "Operation EUFOR Tchad/RCA – Six-Monthly Report to the United Nations," 4.

⁷⁶ Mattelaer, "The Strategic Planning of EU Military Operations - the Case of EUFOR Tchad / RCA," 15.

⁷⁷ On 3 March 2008, Sergeant Gilles Polin (French Army, 1st RPIMA), was killed in action at the Chadian-Sudanese border. EUFOR Tchad/RCA, "EUFOR Suffers Its First Fatality - Press Release," (10 March 2008).

Chapter 5

EVALUATION FOR THE EU'S FUTURE MILITARY OPERATIONS

Today, the growing interdependence of countries in the European area requires a global approach to the security and defense problematic. No single country can support, alone, the necessary cost to develop an air power able to intervene in the resolution of all crises.

- General Richard Wolsztynski, French Air Force Chief of Staff

The study has analyzed the historical record of France's operations in Africa, established a model based upon those operations, and then used the model to compare the French approach to that of EU missions in three case studies. This chapter looks across the model and the case studies to consider the significance of this study for the European Union in terms of the use of air power. Through the deviation from the French model, it assesses key operational factors in order to determine implications for the future of the European Defense and Security Policy (ESDP), and looks for ways to improve EU military forces and organization, to include procurement and training strategies, and the use of air assets in limited operations.


MAJOR FINDINGS OF THE STUDY


Comparison of Cases


Table 1 illustrates a comparison of the three cases based on the three units of analysis explored in this thesis. Each color represents the level of match to the model.


Table 1. Comparison across the Case Studies


		FRENCHMODEL											
		POLITICAL: AIR DIPLOMACY				MILITARY ORGANIZATION			EMPLOYMENT OF AIR ASSETS				
		Clear mandate	Small force footprint	Flexible use of air power	Tight Political control	Centralized C2	Deployable C2 Structures	4 Characteristics	Airlift	Attack aircraft & support	Helicopters	Employment 2-echelon & small cells	RPA
													Not in the model
OPERATIONS	ARTEMIS												N/A
									C130				
	EUFOR RDC												
			2-echelon strategy	Ground troops	National ties	National ties		Continuity	SALIS	1 week/month			B-Hunters
	EUFOR TCHAD/RCA												
			Helicopters	Partial OPCON on fighter				Continuity	SALIS	Partial OPCON	Number		CL 289

 Match to the model

 Close Match to the model

 Minor deviation from the model

 Same result as the model but for different reasons

 Deviation from the model

Color-Coding explanation:

Using a color code, the table allows establishing a visual help for the interpretation. In that code, blue and green respectively represent a near-perfect and a close match to the model. For example, the use of fighter aircraft or helicopters during operation Artemis matched the expectations of the model.

The yellow color represents a minor deviation. For example, the use of fighter aircraft during operation EUFOR RD Congo followed the same pattern as the model would predict (Minimal air superiority, importance of CAS and ISR missions), but they were deployed only one week per month where the model would have predicted a full presence during the entire operation.

The table uses the orange color when the characteristics during the EU operation matched the model, but for a different reason. For example, while the model would expect a small force footprint due to the use of air power, the mechanism also suggests that attack aircraft would allow that to happen. During EUFOR Tchad/RCA, the analysis demonstrated that the force footprint was small; however, the importance of helicopter operations explained that result.

Finally, the red colored squares point out major deviations from the model. For example, the model would have predicted a tight political control on air assets by the PSC during EU operations. However, some countries directly retained an OPCON on critical assets, resulting in a major deviation, and therefore a red square in the table.

Source: Author's Original Work

Although the attribution of color-coding results from qualitative analysis of model factors, it is sometimes difficult to identify a deviation or isolate causality to a single factor; however, this does not diminish the usefulness of the table, whose primary purpose is to study the trend across the case studies. Furthermore, congruence to the model does not mean there is not any problem to fix. For example, the model shows the weakness of French forces in the field of strategic airlift. Therefore, a match of the EU operations to the French model in that specific field would mean that the EU would need to implement reforms to improve its strategic airlift capabilities. Table 1 summarizes the findings of this study.

Interpreting the Results

Looking along the operations, Table 1 clearly indicates that operation Artemis matched the French model for the use of air power, while the other two EUFOR missions in Africa presented numerous deviations from the model. The different case studies, and specifically Chapters 3 and 4, detail the reasons for these deviations. Where the Table of Comparison comes into play is when we study it across the different operations. The isolation of each element, its evolution across time and operations, and the reasons for its particular deviations should inform our understanding of its influence on the use of air power in limited operations.

This section discusses the nine major interpretations from this study along the three levels of analysis: the employment of air assets, the EU military organization, and the political level of decision. This is followed by five assessments on specific elements and the way ahead for the European Union in these particular fields.

Employment of Air Assets

1. The Two-Echelon Strategy is an Enduring and Reliable Model for Limited Operations

The French model of two-echelon strategy, and the use of small cells, fits the EU's strategy. Studying across the three operations, this element shows close congruence to the model. Two aspects of this strategy are particularly promising for future EU strategies. First, as our study suggests, prepositioning, and forward basing of air assets

were an important part of a successful strategy. Even if modern capabilities allow one to perform missions directly from Europe, specialists recognized the importance of at least one local base in Africa.¹ Second, the concept of small, deployable units provides a modular system. The French model used small cells and the EU reproduced this example. This has proved an effective system and it is particularly interesting in the actual structure where EU countries participate if they are willing. They can provide modules according to the operation's needs.

These two aspects of organization of forces are very effective, as they provide modularity and reactivity; however, this model presents a legacy from the French colonial past, using defense agreements with its former colonies for the prepositioning of forces. How might one translate it into an EU-African concept? It may be difficult for the EU to create the same bonds that France kept with its former colonies, but if the EU remains concerned about the stability of the African continent, then it is definitely an effective way to conduct missions.

2. Weakness of the EU Helicopter Component

The three EU operations demonstrated the importance and the weaknesses of the EU's helicopter component. As in the French model, helicopters consistently fulfilled the three important missions: airlift, SAR/CSAR (when applicable), and close air support for ground troops. Even though the first two operations showed a match or a close match to the model, the last one demonstrated the weaknesses of the EU's ability to generate enough helicopter assets to answer its needs.

The use of helicopters in the EUFOR Tchad/RCA mission marked a significant deviation from the model. It seems difficult to conclude on the only major deviation during EUFOR Tchad/RCA and it is difficult to tell if this represents a long-term deviation but it has nevertheless exposed European weaknesses. This operation showed an increasing need for helicopters. It also showed that helicopter units provide a less expensive way for smaller EU countries to contribute in key roles for operations with equipment that provides dual-purpose use in both military and military support to civil emergency for the home country.

¹ Forget, "Spécificités du Rôle et des Contraintes des Forces Aériennes", 38.

3. An Important but Decreasing Role for Attack Aircraft

The three case studies demonstrated the importance of attack air assets in their ISR role and as a reserve of firepower, but a decreased emphasis in their use as tactical assets. The Table of Comparison demonstrates two deviations during the last two operations under scrutiny. Attack aircraft under French OPCON and stationed in Chad provided a CAS umbrella during operation EUFOR RD Congo and EUFOR Tchad/RCA. These two operations affirmed the important presence of fighter aircraft as an insurance policy, but not their central role in the operation in that field. That said, fighter aircraft provide rapid response, on call firepower to either deter or compel adversaries in addition to ISR capabilities. If an operation requires a small footprint from its ground component, those small units may need to rely on forward based fighters for firepower that heavy armor units would otherwise have provided to the mission (see Interpretation 8 below).

4. An Enduring Strategic Airlift Weakness

The Table of Comparison also stresses the close match of airlift operations to the model during the three EU missions. The minor adaptations were in the use of C130s during operation Artemis and the use of the Strategic Airlift Interim Solution (SALIS) during the other two African missions. This close match to the model across the three operations essentially means two things. First, it shows the importance of tactical airlift and the EU's reliance on it during African operations. Second, and more problematic, is that like France, EU forces experienced a chronic weakness with their strategic airlift component. If the EU contemplates future missions in Africa of greater size and scope, then it needs to plan for improved strategic airlift capabilities in order to provide support to those operations.

From a theoretical point of view, according to the model, the fact that there is a consistent close match but not a perfect match to the model indicates that the EU has consistently tried to implement corrective measures vis-à-vis the French model. In that perspective, the Table of Comparison has shown its usefulness as a convenient tool to highlight specific area for systemic improvements.

Military Organization

5. The Successful Deployment of Command and Control Structures is a Strength of the EU Military Structure

The Table of Comparison expresses a consistent match of the successful use of deployable C2 structures. One of the strengths of the EU military organization has been its ability to deploy effective command and control structures. Consistent with the French model across the three operations, this aspect shows the ability of EU states to supply this critical capability. It also demonstrates the ability of EU countries to participate in multinational structures. Keeping in mind the likelihood it will find itself operating in regions where assets are not already prepositioned (Interpretation 1), the EU needs to strengthen this capability.

6. The lack of Continuity During the Planning Phases Decreased the Effectiveness of the EU's Military Organization

The lack of continuity in the EU military organization highly reduces its effectiveness in crisis response and is one major findings of the thesis. This shortfall is politically controversial inside the EU. However, whether or not they advocate for the constitution of a standing EU OHQ, this study shows to political leaders that the lack of continuity represents a major limit to military effectiveness.

As the building of the model demonstrated (Chapter 1), the four characteristics of uniqueness, strategic watch, openness to the Ministry of Foreign Affairs, and continuity were critical to the effectiveness of the French answer to crises. Except during operation Artemis, which arguably was the “Europeanization of a French operation,” the two other operations showed a consistent deviation from the model, particularly in terms of continuity.² This critical mechanism, which allowed the French to answer mission requirements quickly, was missing and resulted in long delays (respectively three and five months) in the launch of the two EUFOR missions.

Political Level: Is There a Concept of European Union Air Diplomacy?

² *European Security and Defence Policy: The First Ten Years (1999-2009)*, 182.

The fact that each EU operation operated with a clear mandate does not call for specific conclusions regarding this study except that it matched the French model. However, the three other factors call for three interpretations.

7. National Ties Challenged the Centralized C2 and Political Control of the EU Political Level

An interesting outcome from the study, are the conclusions that run across not only the three case studies, but also across the political direction and military organization from the European Union operations. In that perspective, the interpretation of the deviations from the model for the command and control organization relates to deviations relating to political control. Where the French model would have called for a centralized control and a tight political control, the study of the two last operations showed a deviation from the model. This result occurs due to the national influences in the EU operations at the political and military levels through the command and control structure. This latter point was particularly powerful during EUFOR RD Congo mission (Chapter 3).

This result is a normal expectation and reflects common behavior in any coalition warfare, where double hatting of key commanders is the norm. As a result, coalition partners remain linked to their national structures, and under their national political influence. However, the last case study expresses a more optimistic note. It seems that the influence of national policies at the political level did not translate to the military level. The role of French troops and the efforts of the Force Commander to remain neutral are the best examples to illustrate this situation (Chapter 4).

8. Air Power Provides Three Ways to Decrease the Footprint of a Force during Limited Operations

This study provides three different mechanisms where the use of air power allowed reducing the size of the force necessary to fulfill a mission. As Table 1 demonstrates, it is interesting to notice that three different mechanisms provided the same results, as our case studies were three successful operations according to their objectives and mandates, and involved small size contingents.

First, operation Artemis remained consistent with the French model, and used the presence of attack aircraft to reduce the size of the contingent (Chapter 2). EUFOR RDC set up a two-echelon strategy, including a reserve of land forces on alert-status in Gabon. It relied on tactical airlift to deploy them in case of crisis (Chapter 3). Finally, during EUFOR Tchad/RCA, the mobility of the force, enhanced by helicopters was the critical element to monitor a huge area with a relatively small force (Chapter 4).

Walter McDougall wrote, “Strategy is a form of economy, a function of scarcity.”³ From that perspective, strategists may enjoy the lessons of this study as air power provided ways to fulfill the three missions with small contingents. These examples may provide flexible options to strategists in accordance with operational and political conditions.

9. The Decreasing Role of Air Power as a Diplomatic Tool

Finally, the thesis provided evidence that attack aircraft have played a restricted role as a diplomatic tool in EU limited operations in Africa, in particular during the last two EUFOR missions. Attack aircraft remained important in the EU strategy as they stood as the final insurance in case of strong difficulties. In addition, their presence as CAS assets in the three operations indicates a continuing importance of fighter aircraft to the EU intervention strategy.

However, as Chapters 3 and 4 show, attack aircraft have lost their central role as diplomatic tools. In particular, the fact that they only deployed one week per month during EUFOR RD Congo, and that operation Epervier retained OPCON over its assets during operation EUFOR Tchad/RCA affirms the decreasing importance of these assets in the overall strategy.

THE WAY AHEAD

It is beyond the scope of this thesis to explore all the possible solutions to the nine findings discussed above; however, this research has fostered a reflection on five specific fields important to improve the future use of air power by EU forces. Far from answering

³ Walter A. McDougall, *The Heavens and the Earth: a Political History of the Space Age*, Johns Hopkins paperbacks ed. (Baltimore, Md.: Johns Hopkins University Press, 1997), 177.

all the questions identified in this thesis, this section outlines the fields of inquiry for future study.

1. Future EU policy toward Remotely Piloted Aircraft

This study highlights a first issue for the European Union, namely the policy to implement regarding Remotely Piloted Aircraft. As noticed in operation EUFOR RD Congo, the use of RPAs was an anomaly concerning the model. Even though it was a modest and unsuccessful contribution, the anomaly also appeared during EUFOR Tchad/RCA. We expect to see more RPAs in future operations, in particular as ISR platforms. As the use of RPAs by the US forces in Iraq and Afghanistan demonstrates, we might also expect to see more of them in a strike role. These examples should foster the reflection in EU countries on the development and acquisition of a fleet of RPAs. As most of these countries are in their first steps, this perspective should nurture cooperation with a mindset directed toward standardization and a common procurement policy.

2. The Necessary Enhancement of Helicopter Capabilities

Operation EUFOR Tchad/RCA not only expressed a drastic deviation from the French model, but also from the two previous operations. It would therefore be too much of a stretch to draw conclusions from this single deviation. However, looking across the spectrum of operations, Claire Curtis-Thomas showed that same shortages occurred at the same time in Afghanistan, a main combat operation.⁴ As Alexander Nicoll remarked, during operation EUFOR Tchad/RCA, “although the EU collectively boast around 1,000 helicopters, it proved difficult to find more than a dozen adapted to operate in the harsh

⁴ Claire Curtis-Thomas, "EU Foreign Policy – Reduced Liberty of Action in Operations Due to Lacking Air Transport Capabilities – the Special Case of Transport Helicopters," *The European – Security and Defence Union* 2010, 14.

desert conditions of Eastern Chad.”⁵ A parliamentary report also pointed out that Ireland had to rent its two helicopters for that operation.⁶

The enhancement of helicopter procurement should therefore dictate part of the EU procurement policy in the next few years. In that perspective, states should welcome the Franco-British helicopter initiative, which aims at strengthening the existing capabilities and enhancing European capabilities.⁷ In the same vein, the future commissioning of the European NH90 and the growing EC725 fleets should enhance EU helicopter capabilities. However, these are mid-size helicopters, and the EU cannot avoid considerations regarding the procurement of large helicopters to answer more completely its needs.⁸

3. Improving Cooperation and Common Training over Attack and ISR Aircraft

The experience of the three European operations in Africa demonstrated the growing importance of ISR capabilities, and the necessity for the EU to work on its expeditionary capabilities. Attack aircraft saw their tasking in CAS and attack mission decrease while their role as ISR platforms remained important. In today’s operations, particularly the ones where ground forces remain scarce, air power plays a huge role in providing intelligence to the operational and political levels. In that perspective, the commissioning of new reconnaissance assets in France, Germany, the UK, and Sweden should nurture a common approach regarding the standardization of intelligence collection practices.

⁵ Alexander Nicoll and Jessica Delaney, "EUFOR in Chad and Car. The EU's Most Taxing Mission Yet," *IJSS Strategic Comments* 14, no. 4 (May 2008), <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?hid=109&sid=8c2f85c5-c961-4366-a73c-12f08233bd34%40sessionmgr111&vid=2> (accessed 17 November 2010).

⁶ Comptroller and Auditor General Government of Ireland, "Accounts of the Public Services 2008," (September 2009), 281-282.

⁷ This initiative provides funding for the enhancement of existing fleets, in particular of new EU member-states who own old Russian-helicopter fleets, on the condition that they make them available for NATO or EU operations. For further details, see Seibert, "Operation EUFOR Tchad/RCA and the European Union's Common Security and Defense Policy," 65.

⁸ For more details on the acquisition process of middle-size and large helicopters, see Curtis-Thomas, "EU Foreign Policy – Reduced Liberty of Action in Operations Due to Lacking Air Transport Capabilities – the Special Case of Transport Helicopters," 14.

One of the noticeable features concerning attack aircraft during the three operations remained the absence of fighter aircraft other than French ones. Three main factors may explain this situation. French aircraft were already involved in operations at prepositioned bases. As the French model predicts, these operations required a low number of fighters. More fighter aircraft would have duplicated existing capabilities. The second reason is an economical one. The cost involved in deploying fighter aircraft is significant, and therefore, countries may be reluctant to deploy them, particularly if another country is ready to do it. Finally, most European countries, with the exception of France and the UK, historically designed their air forces to face the Soviet bloc. Therefore, these air forces lack expeditionary capabilities and many are optimized only for the air defense mission.

This assessment of the situation calls for several solutions. European countries may not always have prepositioned forces in future areas of operations. Furthermore, it may be difficult to reduce the cost of operating attack aircraft abroad. Even if the design of new and future aircraft allows reducing the maintenance and cost of deployments, it will probably remain a burden to deploy these assets.

The most promising solution for European air forces remains the third element: improving its expeditionary capabilities. Several solutions involving cooperation among states may enhance European solutions in case of crises. For example, it has become necessary to develop long-range deployment exercises at a European level. Such exercises would enhance the credibility and effectiveness of the air forces. The EU must also capitalize on the different experiences, for example, the French and British long tradition for expeditionary air force use, or the more recent experiences in Afghanistan of the German, Belgium, and Dutch air forces. Finally, EU countries should develop training opportunities with countries that possess capable fighter assets, but lack expeditionary experience, such as Sweden.

4. Fixing Strategic Airlift Capabilities

The three operations have shown the lack of adequacy of EU airlift capabilities similar to the French model. As emphasized by the French Air Force Lieutenant Colonel LeBras, airlift transport must become a means for the European Union to become an

actor on the world scene, specifically, if there is no recourse to use NATO and US assets because of the political situation.⁹

European air forces have set up measures during the three operations to reduce their strategic airlift shortages; however, their effects remained limited. Speaking about the SALIS initiative and the leasing of civilian airlift assets, Colonel Peugnet pointed out the lack of flexibility of private companies.¹⁰ Furthermore, already delayed, the future commissioning of the A400M, the new European airlift aircraft, will greatly improve the situation, but will not solve all the problems.

Finally, the most promising solution results from the enhancement of the cooperation between air forces, namely the launch of the European Air Transport Fleet.¹¹ On 10 November 2008, 12 European countries launched this initiative aiming at “reducing European air transport shortfalls by pooling aircraft such as A400M and C130.”¹² In the same vein, Germany, France, Luxembourg, and the Netherlands gathered most of their respective airlift capabilities under a European Air Transport Command (EATC).¹³ These measures seem promising in filling the gap of airlift capabilities, and the EU should promote their expansion.

5. The Reform of EU's Military Command Structures: the “Useful Duplication”

EU military command structures have shown their limits in crisis management. In the present configuration, the European Union has three alternatives for the planning and command and control of its operations: use NATO's headquarters at SHAPE according to the “Berlin+” agreement, use the European Operation Center whose

⁹ Eric Le Bras, “Le Transport Aérien Militaire, Vecteur de la Diplomatie Aérienne et de la Résolution des Conflits,” *Penser Les Ailes Françaises* Winter 2010/2011, 60.

¹⁰ Peugnet, “L'Impact du Facteur Aérien dans la Planification d'une Opération Européenne,” 59.

¹¹ European Defence Agency, “European Air Transport Fleet Launched,” (10 November 2008).

¹² The twelve countries are Belgium, Czech Republic, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Romania, Slovakia, and Spain. European Defence Agency, “European Air Transport Fleet Launched.”

¹³ Seibert, “Operation EUFOR Tchad/RCA and the European Union's Common Security and Defense Policy,” 65.

capabilities are limited, or use one of the five non-permanent OHQs that EU member states can provide.¹⁴

According to the case studies, none of these alternatives proved satisfactory. First, political reasons hampered the use of the NATO structure. As this thesis showed, the will for European autonomy precluded the call for NATO's help. The second solution has shown its limits. In 2005, the EUMS looked confident in its capabilities to provide early warning and strategic planning for EU operations.¹⁵ However, its capabilities proved insufficient to launch the two subsequent operations in 2006 and 2008. In particular, operation EUFOR RD Congo and EUFOR Tchad/RCA have shown the limits EUMS staff in providing continuity. The third solution, the one the EU ultimately used in each of the three case studies, has also demonstrated its lack of continuity (Interpretation 6). Jean de Ponton d'Amnecourt summed up this lack of adequate solution stating that, "the EUFOR multilateral mission had shown the need for a permanent European military chain of command."¹⁶

The integration of EU forces will require a permanent structure. As General Wolsztynski contends, the lack of coherence in the command and control structure has long impaired the global coherence of forces jointly engaged in operations. He further recommends that we must adapt our command and control structures to the need of the European defense, as they constitute a "tremendous tool for the integration of European air forces."¹⁷ Furthering this call after Operation Artemis, General Neveux introduced the concept of "useful duplication" of EU structures with NATO structures.¹⁸ This call is still valid today.

As this chapter reviewed the results of the three EU operations in Africa, it unearthed some of the weaknesses of the EU military organization. Some of the

¹⁴ The five countries able to provide an OHQ are Germany, France, the UK, Italy, and Greece. For further details, see Peugnet, "L'Impact du Facteur Aérien dans la Planification d'une Opération Européenne," 55.

¹⁵ In 2005, General Perruche, Director General of the EU Military Staff declared that it would provide "early warning, situation awareness, and strategic planning." For further details, see Jean-Paul Perruche, "The European Union Military Staff on Its Way Ahead," (2005), <http://www.eurunion.org/legislat/ForeignPolicySecurity/EUMilArt.pdf> (accessed 27 October 2010).

¹⁶ de Ponton d'Amnecourt, "The EU 'S Africa Strategy: Where Do We Come from and Where Do We Go?," 11.

¹⁷ Wolsztynski, "L'Armée de l' Air: Facteur d' Intégration Européenne," 13.

¹⁸ Neveux, "Vers une Union Opérationnelle? Artémis," 21.

solutions necessary to fill in these gaps are highly political steps, which some countries may be reluctant to take; however, this thesis has shown they are necessary ones in order to translate effectively political decisions into military action and guarantee military effectiveness.



CONCLUSION

The European Union must become a producer of external security, not a "world policeman": it should exercise, by means of its presence and influence, a positive effect on world affairs.

- Stef Goris, President of the WEU Assembly (2005)

The European Union, notwithstanding its commitment to African ownership, shall remain prepared to become involved, whenever necessary, in crisis management in Africa with its own capabilities.

- The Council of the European Union (12 April 2005)

This thesis aimed at improving our understanding of the mechanisms for the use of air power in limited operations in Africa. The central issue of this study was a focus on the specific political and operational contextual factors, which influenced the use of air power during the three European Union-led military operations in Africa between 2003 and 2009. This thesis used the French historic experience in limited operations, from the 1960s to the early 2000s in order to develop a model for the use of airpower as an instrument of policy in Africa.

This study provides evidence that French air power strategy in limited operations in Africa greatly influenced the European Union's military missions. However, political and operational factors induced deviations from the model. The analysis of these deviations demonstrates the EU's different approach of the use of air power on the one hand, and on the other hand, highlights some weaknesses of the EU's military organization and force equipment.

THE FRENCH MODEL

France developed a model in the specific context of a postcolonial environment that may not always suit today's EU's political goals. However, French forces reached a high level of effectiveness, particularly in their use of air power, and it may be a source of inspiration for the future. The model developed in Chapter 1 provides us with three main units of analysis across three levels of operations. At the political level, it revolves around the concept of air diplomacy, a concept that includes the presence of a clear

mandate, the deployment of a small force, and the reliance on a flexible employment of air power under tight political control.

According to the second level of analysis, military organization, the model relies on a centralized planning and command and control organization around the Chef d'Etat-Major des Armées (CEMA or Chief of the Defense Staff) and the Centre de Planification et de Conduite des Opérations (CPCO). This organization also provides four characteristics: uniqueness, strategic watch, openness to the Ministry of Foreign Affairs, and continuity. This organization effectively uses deployable C2 structures.

The study of the third and final level of analysis, the employment of air assets, provided the last characteristics of our model. From that perspective, it emphasizes the use of small cells of fighter and transport aircraft and few helicopters, using a two-echelon strategy that relies on a network of prepositioned, as well as over-the-horizon forces. The attack aircraft element relies on minimal air superiority capabilities, flexible ground attack and CAS assets, and strong ISR capabilities. The main characteristic of airlift capabilities consists in the weakness of strategic assets, and the importance of tactical airlift as the main effort. Finally, deployed in few numbers, the helicopter fulfills the three missions of tactical airlift, CAS in complement to the fighters, and SAR/CSAR.

SUMMARY OF MAJOR FINDINGS

Longitudinal Analysis

The first use of the model consisted in comparing it with each one of the three operations. It provided an assessment about the adequacy to the model of the use of air power during each operation. In case of deviations from the model, it also allowed us to isolate the factors explaining the deviation. The results of these longitudinal studies show that operation Artemis presented a close match to the model, while the two following operations showed deviations from the model.

As Chapter 2 demonstrated, operation Artemis resulted from the “Europeanization of an initially French-led operation.”¹ With France providing most of the troops, staff and command and control facilities, it remained consistent with the French use of air power in limited operations.

¹ *European Security and Defence Policy: The First Ten Years (1999-2009)*, 182.

EUFOR RD Congo presented mainly political deviations from the model. As the study shows in Chapter 3, political factors limited the mandate and shaped a specific use of air power. Furthermore, national interests induced slowness in the planning process, and disrupted the proper command and control structure of the operation. Unlike the model would have predicted, attack aircraft lost their central role in shaping the strategy, and airlift aircraft took this central role.

Finally, the study of EUFOR Tchad/RCA through the lens of the model in Chapter 4 showed both operational and political deviations. According to political factors, indecisions by the member states induced slowness in the planning and force generation processes. The operation also demonstrated a decreasing importance of attack aircraft as political tools. Geography and the strategy set up were the two main operational factors that produced the deviation from the model. They specifically set up the use of helicopters as a central element of the EU's strategy.

Cross Analysis

The second way of using our model consisted of isolating the individual factors inside the three units of analysis, and comparing them to each other across the three operations. This study and the comparison of the model across the three operations brought the most interesting results. Chapter 5 provides the extensive analysis across the case studies. The combination of the longitudinal review and the cross view resulted in nine main findings:

- 1. The two-echelon strategy is an enduring and reliable model for limited operations. The combination of prepositioned and on-call assets is an effective way to conduct these missions.*
- 2. While helicopters remained important for EU military operations, weaknesses appeared in the EU helicopter component. Specifically, EU countries met difficulties in generating enough assets, as well as the right kind of assets for their operations.*
- 3. Attack aircraft remain important in their ISR role and as a "last resort" reserve of firepower, but have lost their central tactical role. Strategies using airlift or helicopter assets supplanted the French strategy using fighter assets.*

4. *The EU has a weak strategic airlift component. Unfortunately consistent with the French model, the EU kept trying to set up interim solutions to correct the lack of strategic airlift assets.*
5. *The successful deployment of command and control structures is a strength of the EU military structure.*
6. *The lack of continuity during the planning phases decreased the effectiveness of the EU's military organization.²*
7. *National ties challenged the centralized C2 and political control of the EU political level. The influence of national chains of command disrupted the normal functioning of EU chains of command.*
8. *Air power provides three ways to decrease the footprint of a force during limited operations using attack aircraft, transport aircraft, and helicopters.³*
9. *The loss of importance of attack aircraft in the overall strategy expresses its decreasing role as a political tool, and the loss of its diplomatic role.*

SUMMARY OF IMPLICATIONS

Both the studies along and across the model revealed some of the weaknesses and shortfalls of the EU's military organization and forces. Although this study proposes a broad review of the use of air power, additional research needs to address these topics. EU officials and scholars have already identified most of them, and the use of the model as well as the three case studies should orient the European Union's future decisions. They specifically encompass the following areas:⁴

1. *The EU should design a common policy toward remotely piloted aircraft. The reflection should encompass both the ISR and attack roles of these assets.*

² Continuity in this context refers to the transitions between strategic watch and pre-planning phase and the planning phase on the one hand, and between planning and execution of an operation on the other hand. For further details, see Chapter 1.

³ As Chapter 5 explains, air power allows for the reduction of troops involved in an operation via three mechanisms: attack aircraft provide firepower, airlift aircraft and helicopter allow for mobility at the theater or tactical level, and increase the effectiveness of a smaller force to monitor a huge area.

⁴ For a detailed analysis, refer to Chapter 5.

2. *According to the enhancement of helicopter capabilities, the EU must look beyond the commissioning of the NH90 and the EC 725, and develop a strategy over the acquisition of a fleet of large helicopters.*
3. *European air forces should improve their cooperation with regard to attack and ISR aircraft. In particular, a common training policy should look at the improvement of overall expeditionary capabilities.*
4. *The global role of the European Union requires it to fix its strategic airlift shortages. The EU policy in that field must foster cooperation and common acquisition programs of military heavy airlift assets.*
5. *The reform of the EU's military command structures must encompass the creation of a permanent structure for the planning and command and control of its operations.*

THE WAY AHEAD

The political role of the European Union on the world stage grows, and the strengthening of its military capabilities should accompany this development. The Lisbon Treaty, reinforcing its political institutions, and specifically its foreign policy tools, should give a boost to this global role. As Euro-advocates emphasize, the strength of the EU's approach to crises relies on the combination of civilian and military means in a global solution. Moreover, as the rapporteur of the Defense committee of the Western European Union reminded during his audition before the Parliament, "a global civil-military approach relies on strong military means."⁵

This study demonstrated that we should seek to understand this military contribution, and specifically the role of air power, in conjunction with other political, diplomatic, and economic factors. Furthermore, the study pointed out areas of improvement and provided clues to enhance European military capabilities. Finally, this story of the European Union military operations in Africa also provided some important lessons to future EU strategists, in particular in the field of the use of air power in limited operations. Given the diversity of operational and political factors they are likely to face, they should not try to template these patterns, but rather use the French experience and

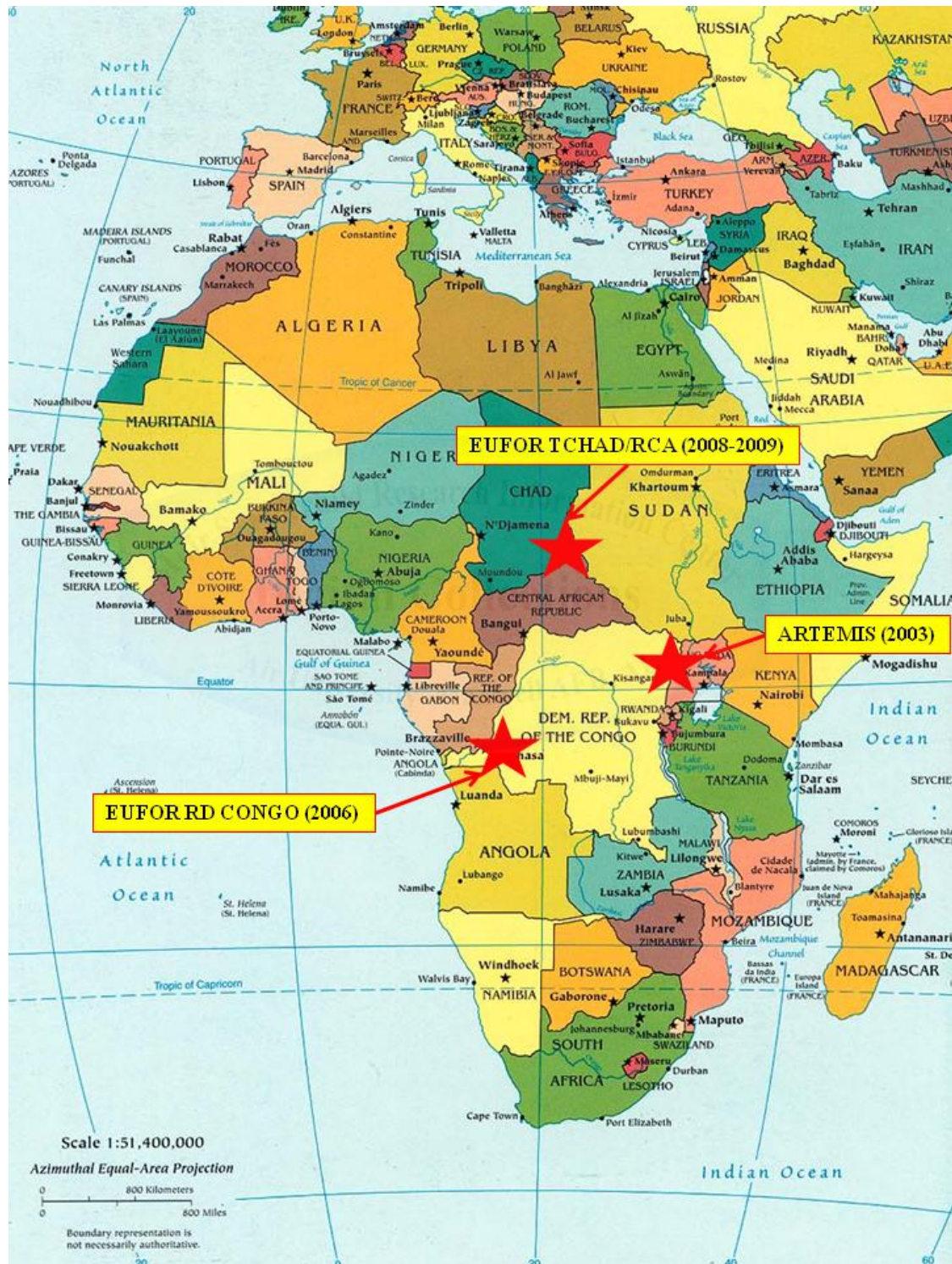
⁵ Assembly of the Western European Union, "La Défense Européenne et le Traité de Lisbonne – Réponse au Rapport Annuel du Conseil," 18.

the lessons learned from these three EU operations to generate more solutions and possibilities. This is the core significance of strategy.



Appendix A

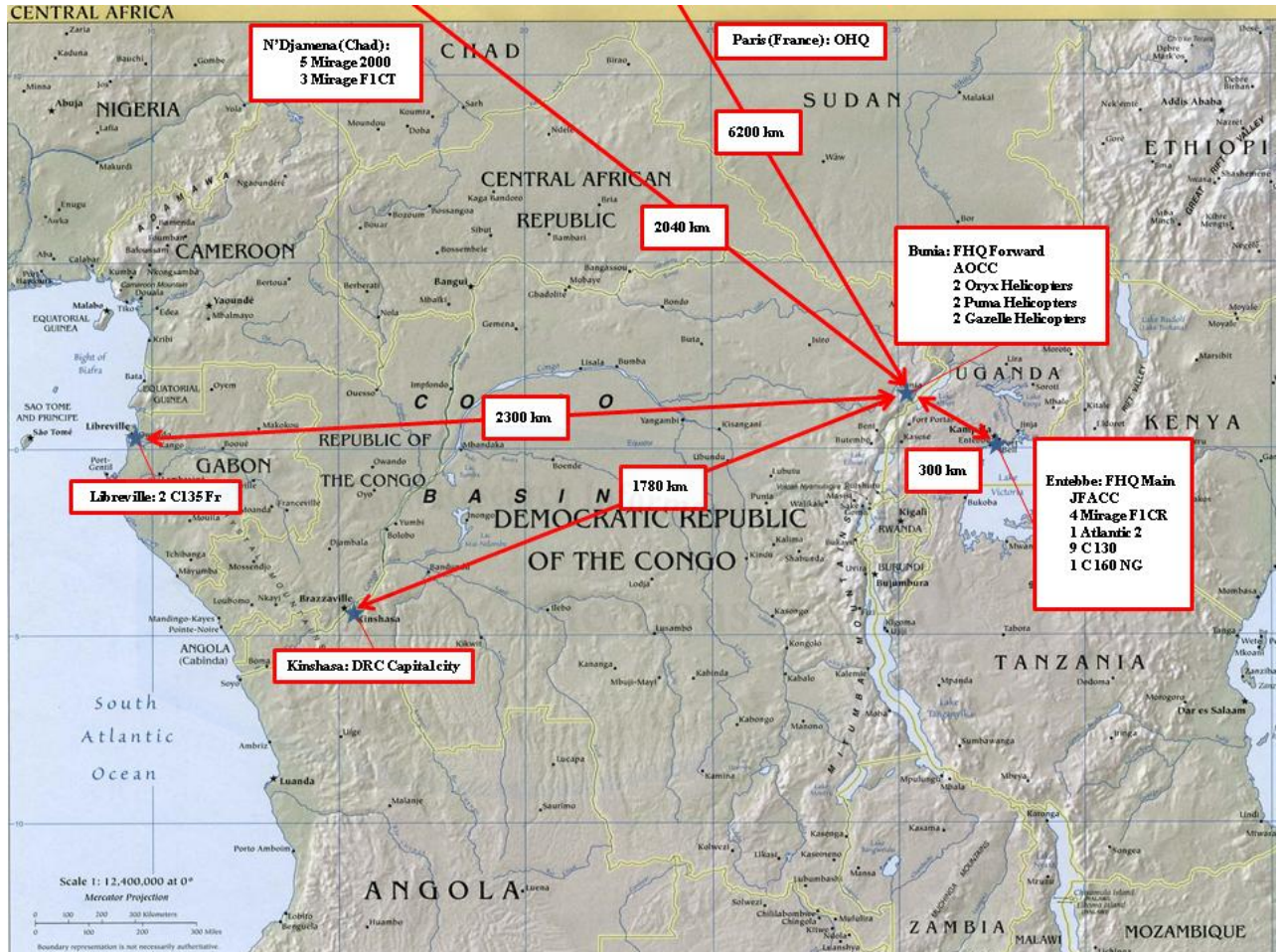
Map of Africa (2003)



Source: Author's creation

Appendix B

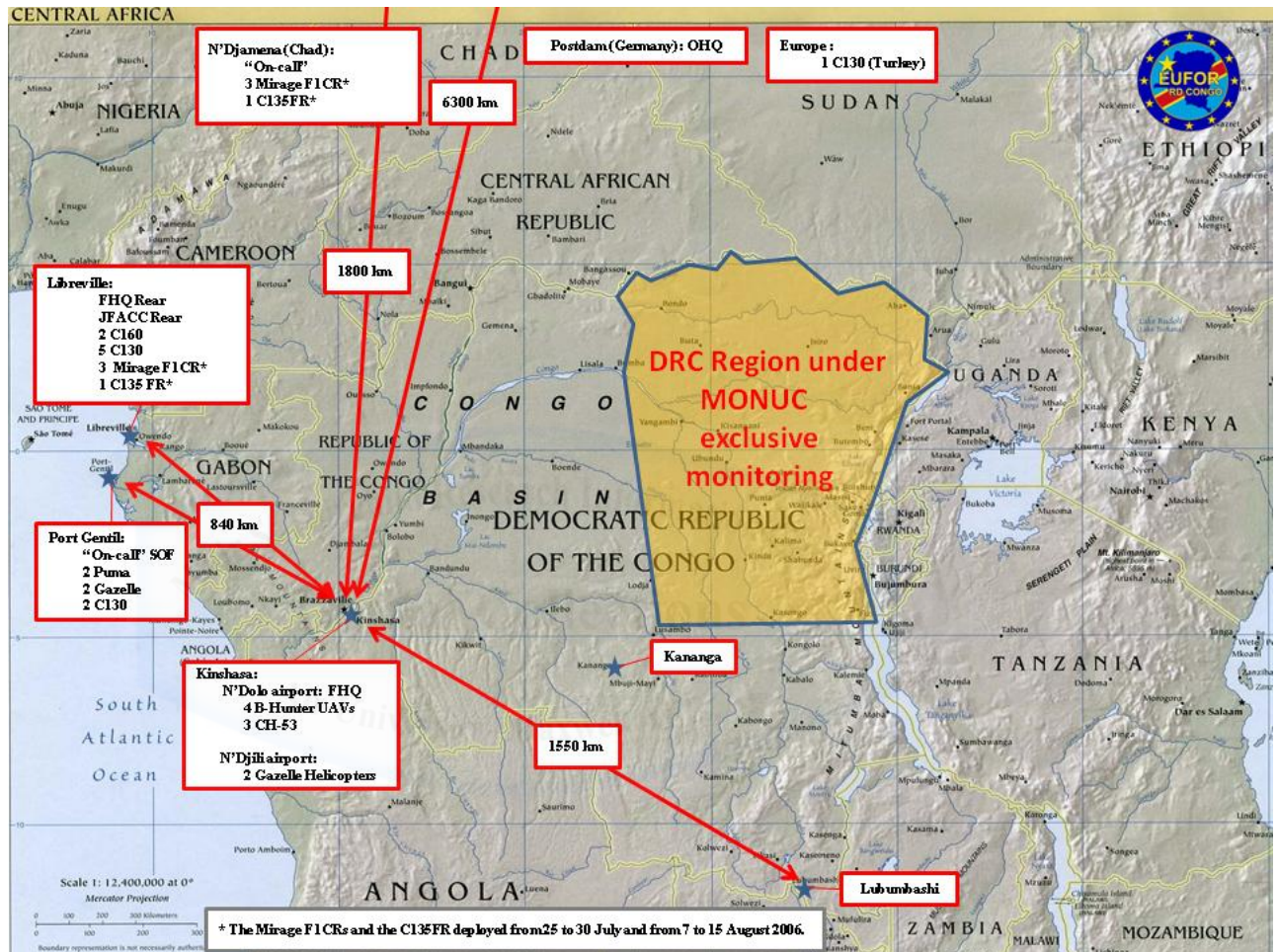
C2 and Air Assets - Operation Artemis (August 2003)



Source: Author's creation from different sources.

Appendix C

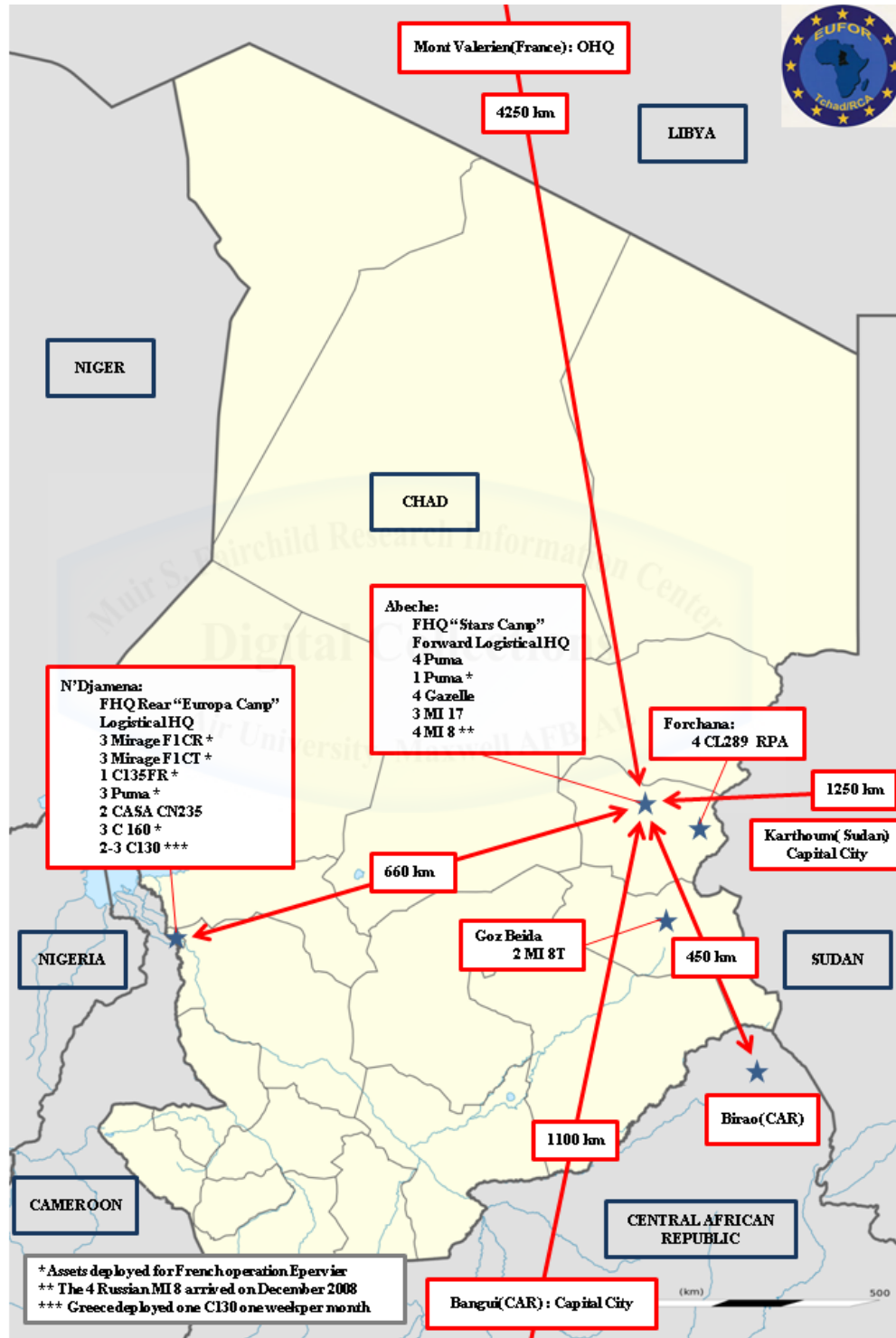
C2 and Air Assets - Operation EUFOR RD Congo (July 2006)



Source: Author's creation from different sources.

Appendix D

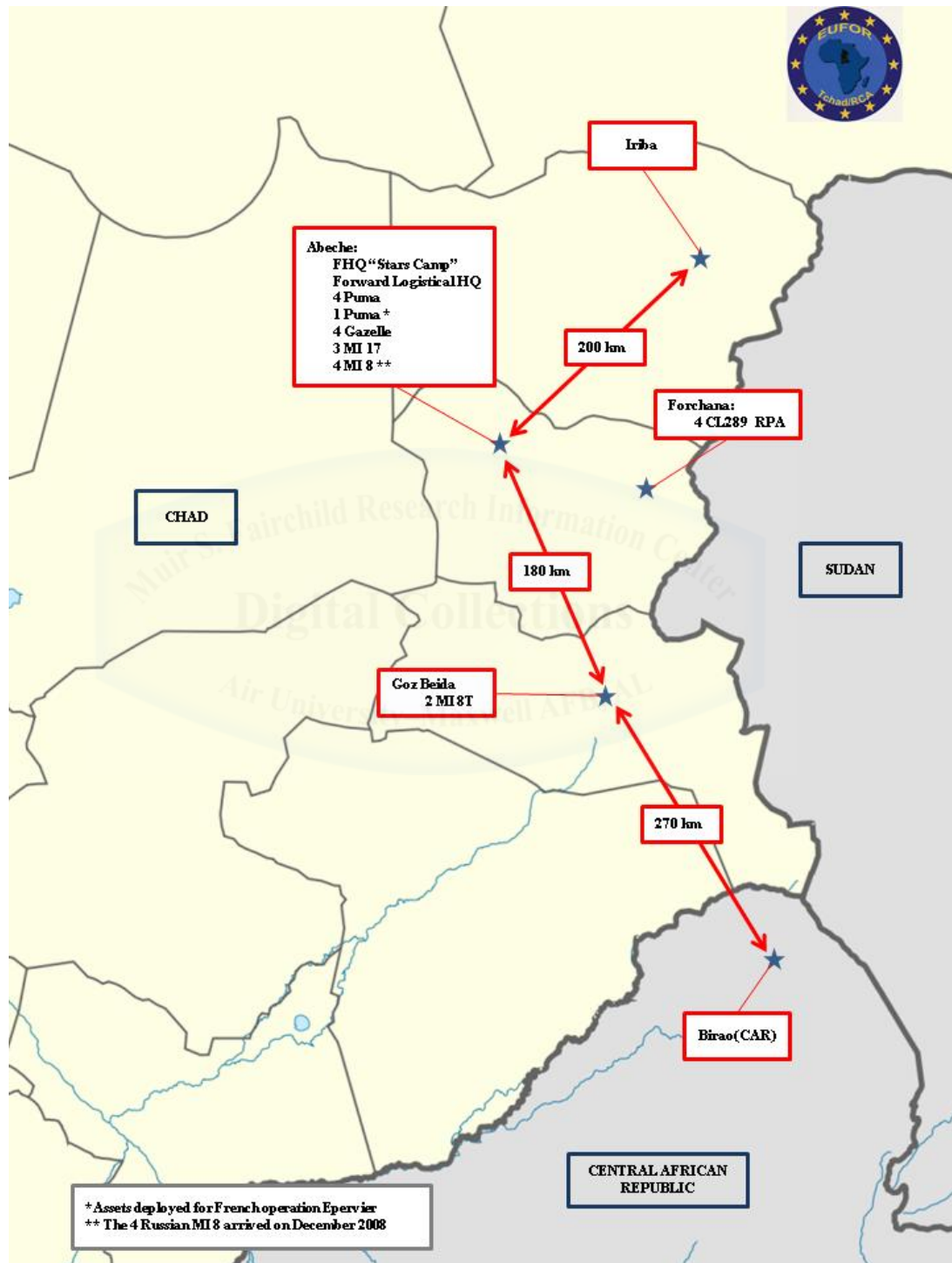
C2 and Air Assets - Operation EUFOR TCHAD/RCA



Source: Author's creation from different sources.

Appendix E

C2 and Air Assets - Operation EUFOR TCHAD/RCA – Darfur Region



Source: Author's creation from different sources.

GLOSSARY

AAA	Anti-Aircraft Artillery
AAR	Air to Air Refueling
ALAT	Aviation Légère de l'Armée de Terre (French Army Aviation)
AMIS	African Union Mission in the Sudan
AOCC	Air Operations Coordination Center
AOO	Area Of Operations
AREOS	Airborne Reconnaissance Electro Optical System
AU	African Union
C2	Command and Control
CAR	Central African Republic
CAS	Close Air Support
CEMA	Chef d'Etat-Major des Armées (Chief of the Defense Staff)
CESA	Centre d'Etudes Stratégiques Aérospatiales (French Air Force strategic studies center)
CID	College Interarmées de Défense (French War College)
CIMIC	Civil Military Cooperation
CJTF	Combined Joint Task Force
CONOPS	Concept of Operations
CPCO	Centre de Planification et de Conduite des Operations (French Planning and Conduct of Operations Center)

CSAR	Combat Search And Rescue
DPKO	Department of Peace Keeping Operations (UN)
DRC	Democratic Republic of Congo
DIS	Détachement Intégré de Sécurité
EATC	European Air Transport Command
EBG	European Battle Group
EC	European Community
EEC	European Economic Community
ELINT	Electronic Intelligence
EU	European Union
EUFOR	European Force
EUMC	European Union Military Committee
EUMS	European Union Military Staff
EUPOL	European Union Police Mission
EUSR	European Union Special Representative
ESDP	European Security and Defense Policy
FAF	French Air Force
FAS	Force Aériennes Stratégiques (French Strategic Air Command)
FHQ	Force Headquarters
FOC	Full Operational Capability
FROLINAT	Front de Libération Nationale
GBAD	Ground Based Air Defense

HQ	Headquarters
IDP	Internally Displaced Persons
IOC	Initial Operational Capability
IPU	Integrated Police Unit
ISR	Intelligence, Surveillance, Reconnaissance
ITF	Inter-Tropical Front
JCS	Joint Chiefs of Staff
JFACC	Joint Force Air Component Commander
JTF	Joint Task Force
LAF	Libyan Air Force
MINURCAT	Mission des Nations Unies en République Centrafricaine et au Tchad (UN Mission in the Central African Republic and Chad)
MONUC	Mission de l'ONU en RD Congo (UN Mission in Congo)
NATO	North Atlantic Treaty Organization
NEO	Noncombatant evacuation operations
NGO	Non-Governmental Organization
ODESSAA	Observation et DESTRUCTION de Sites par l'Arme Aérienne
OHQ	Operation Headquarters
OPCON	Operational Control
OPLAN	Operation Plan
PSC	Political and Security Committee
PTPH	Police Tchadienne pour la Protection Humanitaire

ROE	Rules Of Engagement
QRF	Quick Reaction Force
RPA	Remote Piloted Aircraft
SALIS	Strategic Airlift Interim Solution
SAM	Surface to Air Missile
SAR	Search And Rescue
SASE	Safe And Secure Environment
SIGINT	Signal Intelligence
SOF	Special Operations Forces
SPOD	Sea Port of Debarkation
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UN	United Nations
UNAMID	AU/UN hybrid Mission in Darfur
UNHCR	United Nations Human Rights Council
UNSC	United Nations Security Council
USA	United States of America
USAF	United States Air Force
UTA	Union des Transports Aériens (Former French Airline Company)
WEU	Western European Union

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